

MEMPHIS AND SHELBY COUNTY, TENNESSEE

Vital Statistics Report

2002-2005

Memphis and Shelby County Health Department

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Introduction

The Epidemiology Program of the Memphis and Shelby County Health Department (MSCHD) is pleased to release the 2002-2005 Shelby County Vital Statistics Report. Between 2002 and 2005, the MSCHD Vital Records Office issued 220,094 birth certificates and 225,957 death certificates. The data in this report are for the most part derived from the information also captured on these certificates. Those statistics, obtained from the aggregation of individual records, provide us with knowledge of various health-related and social events and trends within populations and subpopulations in our community. As an example, trends in mortality by gender, age, and cause of death constitute important indicators of the health of our community, as does the relative impact of specific diseases on mortality. This information can therefore serve to direct priorities and planning for the prevention, treatment or research for those conditions.

This report is likely to be useful to the individual residents of Shelby County as well as to various public and private entities in our community, including researchers, public health workers, students, community-based organizations, advocacy groups, planning bodies, and governmental agencies. The organization of the Vital Statistics Report is designed to make the data it contains accessible to these users. The text includes a Highlights section as well as Technical Notes to provide a definition of the terminology and cause of death categories used in the report. In addition, we have provided Healthy People 2010 targets for the indicators referenced in this report. Healthy People is a prevention agenda for the nation that establishes national goals and strategies for disease prevention and health promotion.

This publication is built on the hard work of many individuals at the State and local level. We are grateful for the important work done by the staff of the MSCHD Vital Records Office in serving members of the public who need government vital records. Thanks also to the Tennessee Department of Health staff who assisted the Epidemiology Program in obtaining and interpreting the data used in preparing the report. Finally, special thanks are due to Kathrin L. Brown, MPH for preparing the report. We hope that this document will assist its users to better understand the health status of their community and the health needs of Shelby County residents in a dynamic and fast-changing world.

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January 2008

Table of Contents

Contact Information	2
Introduction	3
Technical Notes	7
Notes about Race and Hispanic Origin	7
New birth certificate implemented in 2004	7
Cause of Death Categories	8
Healthy People 2010	8
Definition of terms	10
Highlights of 2002-2005	12
Vital Records	12
Population	12
Table i. Population and % Change by Race and Hispanic Origin, Shelby County, 2002-2005	12
Births	12
Table i. Birth Statistics, Shelby County, 2002-2005	12
Table ii. Birth Statistics, White Mothers, Shelby County, 2002-2005	12
Table iii. Birth Statistics, Black Mothers, Shelby County, 2002-2005	13
Table iv. Birth Statistics, Mothers of Other Races, Shelby County, 2002-2005	13
Table v. Birth Statistics, Mothers of Hispanic Origin, Shelby County, 2002-2005	13
Infant Mortality	13
Table i. Infant Mortality Rate (per 1,000 live births) by Race and Hispanic Origin, Shelby County, 2002-2005	13
Deaths	14
Table i. Mortality Statistics, Total Population, Shelby County, 2002-2005	14
Table ii. Mortality Statistics, White Residents, Shelby County, 2002-2005	14
Table iii. Mortality Statistics, Black Residents, Shelby County, 2002-2005	15
Table iv. Mortality Statistics, Residents of Other Races, Shelby County, 2002-2005	15
Table v. Mortality Statistics, Residents of Hispanic Origin, Shelby County, 2002-2005	15
Figures and Tables	16
Population	16
Table 1a. 2002 Population Distribution by Age, Race and Hispanic Origin, Shelby County	17
Table 1b. 2002 Median Age	17
Table 1c. 2002 Race Distribution	17
Table 2a. 2003 Population Distribution by Age, Race and Hispanic Origin, Shelby County	18
Table 2b. 2003 Median Age	18
Table 2c. 2003 Race Distribution	18
Table 3a. 2004 Population Distribution by Age, Race and Hispanic Origin, Shelby County	19
Table 3b. 2004 Median Age	19
Table 3c. 2004 Race Distribution	19
Table 4a. 2005 Population Distribution by Age, Race and Hispanic Origin, Shelby County	20
Table 4b. 2005 Median Age	20
Table 4c. 2005 Race Distribution	20

Births in Shelby County, 2002-2005	21
Birth Rate	21
Table 5. Number of Births and Birth Rate by Race (Per 1,000 women of childbearing age, 10-44) and Hispanic Origin of Mother, Shelby County, 2002-2005.....	21
Figure 1. Birth Rate by Race and Hispanic Origin of Mother, Shelby County, 2002-2005	21
Adolescent Pregnancy	21
Table 6. Number of Births and Birth Rate (per 100,000) by Race to Adolescent Mothers (10 to 19 Years of Age) by Race and Hispanic Origin, Shelby County, 2002-2005.....	22
Figure 2. Percent of births to mothers 10-17 Years of Age by Race and Hispanic Origin, Shelby County, 2002-2005.....	23
Figure 3. Percent of Births to Mothers Less than 20 Years of Age by Race and Hispanic Origin, Shelby County, 2002-2005.....	23
Unmarried Women	24
Table 7. Number of Births and Percentage to Unmarried Women by Race and Hispanic Origin, Shelby County, 2002-2005	24
Figure 4. Percent of Live Births to Unmarried Women by Race and Hispanic Origin, Shelby County, 2002-2005	24
Prenatal Care	25
Figure 5. Distribution of Prenatal Care received by Shelby County Mothers, 2002-2003.....	25
Table 8. Average Number of Prenatal Care Visits by Race and Hispanic Origin, Shelby County, 2002-2005.....	25
Figure 6. Average Number of Prenatal Visits by Race and Hispanic Origin, Shelby County, 2002-2003	26
Figure 7. Percentage of Live Births to Women Receiving Late or No Prenatal Care by Race and Hispanic Origin, Shelby County, 2002-2003.....	26
Premature Births	27
Table 9. Percent Premature Live Births (less than 37 weeks gestation) by Race and Hispanic Origin, Shelby County, 2002-2005	27
Figure 8. Percent of Premature Live Births and Percent Change by Race and Hispanic Origin, Shelby County, 2002-2005	27
Low Birth Weight	28
Table 10. Percent of Low Birth Weight (less than 2500 grams) Live Births by Race and Hispanic Origin, Shelby County, 2002-2003.....	28
Figure 9. Percent of Low Birth Weight Live Births by Race and Hispanic Origin, Shelby County, 2002-2005.....	29
Deaths in Shelby County, 2002-2005.....	30
Infant Deaths	30
Table 11. Number of Infant Deaths and Infant Mortality Rates (per 1,000 live births) by Race and Hispanic Origin, Shelby County, 2002-2005.....	30
Figure 10. Infant Mortality Rate by Race and Hispanic Origin, Shelby County, 2002-2005.....	30
Resident Deaths	31
Table 12. Number of Resident Deaths, Crude Mortality Rate and Age-Adjusted Mortality Rate (per 100,000) by Race and Hispanic Origin, Shelby County, 2002-2005.....	31
Figure 11. Age-Adjusted Mortality Rate by Race or Hispanic Origin, Shelby County, 2002-2005.....	32
Top Ten Causes of Death	32
Table 13. Number of Resident Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death, Shelby County, 2002-2005.....	33
Figure 12. Distribution of Deaths by Cause, Shelby County, 2002-2005.....	33
Table 14. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death among White Residents, Shelby County, 2002-2005.....	34
Figure 13. Distribution of Top 5 Causes of Death among White Residents, Shelby County, 2002-2005.....	35
Table 15. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death among Black Residents, Shelby County, 2002-2005.....	36
Figure 14. Distribution of Top 5 Causes of Death among Black Residents, Shelby County, 2002-2005.....	36
Table 16. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 5 Causes of death among Residents of Other Races, Shelby County, 2002-2005	37
Figure 15. Distribution of Top Causes of Death among residents of other races, Shelby County, 2002-2005	37

Table 17. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 4 Causes of Death among Hispanic Residents, Shelby County, 2002-2005	38
Figure 16. Distribution of Top Causes of Death among Residents of Hispanic Origin, Shelby County, 2002-2005	38
Ten Leading Site-Specific Causes of Cancer	38
Table 19. Ten Leading Site-Specific Causes of Cancer Mortality among Shelby County Residents, 2002-2005	39
Table 20. Ten Leading Site-Specific Causes of Cancer Mortality among White Shelby County Residents, 2002-2005	40
Figure 18. Five Leading Site-Specific Causes of Cancer Mortality among White Shelby County Residents, 2002-2005	41
Table 21. Top Ten Site-Specific Causes of Cancer Mortality among Black Shelby County Residents, 2002-2005	42
Figure 19. Top Five Site-Specific Causes of Cancer Mortality among Black Shelby County Residents, 2002-2005	42
Table 22. Breast Cancer Age-Adjusted Mortality Rate (per 100,000) among Females, by Race, Shelby County, 2002-2005	43
Figure 20. Breast Cancer Mortality Rate among Females, by Race, Shelby County, 2002-2005	43
HIV/AIDS Mortality	44
Table 23. Number of HIV/AIDS Deaths and Mortality Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005	44
Figure 21. Age Distribution of HIV/AIDS Deaths for White Shelby County Residents, 2002-2005	45
Figure 22. Age Distribution of HIV/AIDS Deaths among Black Shelby County Residents, 2002-2005	46
Figure 23. Age Distribution of HIV/AIDS Deaths among Male Shelby County Residents, 2002-2005	46
Figure 24. Age Distribution of HIV/AIDS Deaths among Female Shelby County Residents, 2002-2005	47
Assault Deaths (Homicide) and Suicide	47
Table 24. Number of Homicides and Homicide Death Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005	47
Table 25. Number of Suicides and Suicide Death Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005	48

Technical Notes

Notes about Race and Hispanic Origin

The data presented in this report is broken down by race and Hispanic origin. The race categories include White, Black and Other. The other category includes Native American, Alaskan Native, Pacific Islander and Asian. Additionally, the data is presented by Hispanic origin. Note that the data pertaining to those of Hispanic origin is not unique with respect to the data presented by race. Each race category includes both people of Hispanic origin and those not of Hispanic origin. Therefore, in order to get the total for any statistic, add up the race categories only. Do not include the Hispanic origin data as it would be counted twice in the total number.

New birth certificate implemented in 2004

Standard certificates have been the principal means for achieving the uniformity in information upon which national vital statistics are based. The first standard certificates used to register live births and deaths were produced by the Census Bureau in 1990. Since then there have been 11 revisions of the Standard Certificate of Live Birth and 10 revisions of the Standard Certificate of Deaths. The certificates are reviewed every 10 to 15 years to ensure that the standard certificates, reports and items each contain meet health information and administrative needs. The last revision of the Standard Certificate of Birth was done in 1989. With consensus from the states that revision was necessary, the National Center for Health Statistics (NCHS) initiated a review in 2003. The purpose of the review was to develop appropriate data collection documents and recommend means to meet the vital statistics needs of the states and NCHS.

The 2003 revision of the Standard Certificate of Birth is being phased in state by state over the next several years. Tennessee implemented the 2003 revised birth certificate in 2004 in order to meet the new standards for collecting vital statistics data set out by the NCHS. Due to the changes in the certificate relative to the 1989 version, data collected for various items on the birth certificate have changed. The most remarkable of these differences is apparent in the month of initiation of prenatal care. Data collected using the 1989 version showed that approximately 72% of women initiated prenatal care during the 1st trimester with about 3% unknown. The 2004 and 2005 data (using the 2003 revision) shows a drastically different picture. During these years the percent of women beginning prenatal care in the 1st trimester was only about 38% with approximately 30% unknown. Because of the large percentage of unknown data, the statistics for prenatal care have been suppressed for 2004 and 2005 in this report.

This is one example of the comparability issues inherent in changing the birth certificate document. Keep in mind while looking through the Vital Statistics Report the differences which may arise between the data for 2002-2003 and the data for 2004-2005.

Cause of Death Categories

The causes of death in this report are determined from the ICD-10 codes recorded on the death certificate as the underlying cause of death. Various causes listed in this report contain multiple conditions. The multiple conditions that are contained within the causes named in this report are as follows:

Cause of Death	Conditions Included
Heart Disease	Acute rheumatic fever and chronic rheumatic heart disease; hypertensive heart disease; Hypertensive heart and renal disease; Ischemic heart diseases including acute myocardial infarction, other acute ischemic heart disease, other forms of chronic ischemic heart disease and atherosclerotic cardiovascular disease; Other heart disease including acute and subacute endocarditis, diseases of the pericardium and acute myocarditis, heart failure and other forms of heart disease
Cancer	All malignant neoplasms
Chronic Lower Respiratory Disease	Bronchitis, chronic and unspecified; Emphysema; Asthma; Other chronic lower respiratory diseases
Nephritis	Acute rapidly progressive nephritic and nephrotic syndrome; chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified; Renal failure; Other disorders of the kidney
Accidents	Transport accidents including motor vehicle accidents, other land transport accidents, and water, air and space and other unspecified transport accidents; Non-transport accidents including falls, accidental discharge of firearms, accidental drowning and submersion, accidental exposure to smoke, fire and flames, accidental poisoning and exposure to noxious substances

Healthy People 2010

Healthy People is a prevention agenda for the Nation produced by the Department of Health and Human Services, that is built upon a 1979 Surgeon General Report, *Healthy People*. This initial report provided targets to reduce premature mortality in four age groups in the 1980s and supported by objectives with endpoints for achievement by 1990. In 1990, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* was released. This document was a comprehensive agenda organized into 22 priority areas with 319 supporting objectives. The three overarching goals of this document were to increase years of healthy life, reduce disparities in health among different population groups and achieve access to preventive health services. The Healthy People 2010 (HP2010) framework was built on the initiatives of the past two decades. The objectives in HP2010 were developed through

the Healthy People Consortium which was an alliance of 350 national membership organizations and 250 State health, mental health, substance abuse and environmental agencies.

Healthy People 2010 was designed to achieve two overarching goals. The first goal is to increase quality and years of healthy life, in other words to help individuals of all ages increase life expectancy and improve their quality of life. The second goal is to eliminate health disparities among different segments of the population.

Throughout this report, various HP2010 goals are presented. These include adolescent pregnancy, premature births, low birth weight live births, infant mortality rate, deaths from heart disease, stroke diabetes, and various cancers, homicides and suicides. Each HP2010 goal is stated along with the status of that goal within Shelby County as of 2005.

Definition of terms

Age-Adjusted Mortality Rate: A mortality rate statistically modified to eliminate the effect of different age distributions in the different populations.

Age-Specific Mortality Rate: A mortality rate limited to a particular age group. The numerator is the number of deaths in that age group; the denominator is the number of persons in that age group in the population.

Birth Rate: The number of live births in a population in a year divided by the midyear resident population. Birth rates are expressed as the number of live births per 1,000 population. The rate may be restricted to births to women of specific age, race, marital status or geographic location (specific rate), or it may be related to the entire population (crude rate).

$$(\text{Total Live Births/Total Population}) \times 1000$$

Or

$$(\text{Live Births to Mothers of Specified Ages/Female Population of Same Specified Population}) \times 1000$$

Crude Mortality Rate: The mortality rate from all causes of death for a population.

General Fertility Rate: The total number of live births, regardless of age of mother, per 1,000 women of childbearing age, 15-44 years.

Gestation: The period beginning with the first day of the last normal menstrual period and ending with the day of birth or day of termination of pregnancy.

Infant Death: The death of a live-born child before his or her first birthday. Neonatal death is the death of an infant less than 28 days after birth; postneonatal death is the death of an infant between 28 days and 1 year after birth.

Infant Mortality Rate: A ratio expressing the number of deaths among children less than one year of age reported during a given time period divided by the number of births reported during the same time period. The infant mortality rate is usually expressed per 1,000 live births.

Live Birth: Complete expulsion or extraction of a product of conception from its mother, irrespective of the duration of the pregnancy, which after separation breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation or definite movement of voluntary muscles, whether the umbilical cord has been cut or the placenta is attached. Each infant from such a birth is considered live born.

Low Birth Weight (LBW): Defined as less than 2,500 grams or 5 pounds 8 ounces.

Median Age: This measure divides the age distribution in an area into two equal parts: one-half of the population falling below the median value and one-half above the median value. Median age is an indicator of the age composition of a population.

Mortality Rate: A measure of frequency of occurrence of death in a defined population during a specified interval of time; usually measured per 100,000 population.

Preterm Birth: Live birth which occurs before 37 weeks of gestation.

Prenatal Care: Medical care provided to a pregnant woman to prevent complications and decrease the incidence of maternal and prenatal mortality. Late prenatal care is that which begins during the third trimester of pregnancy.

Highlights of 2002-2005

Vital Records

All of the data presented in this report was collected from the Standard Certificate of Live Birth (Birth Certificate) and Standard Certificate of Death (Death Certificate) for all Shelby County Residents. Within the Memphis and Shelby County Health Department, the Vital Records Section issues Birth Certificates and Death Certificates to the community as needed. The number of Birth and Death Certificates issued by the MSCHD Vital Records Department from 2002 to 2005 are presented as follows:

	2002	2003	2004	2005
Birth Certificates	55,296	46,964	52,658	67,176
Death Certificates	59,612	57,641	50,828	57,876

Population

Table i. Population and % Change by Race and Hispanic Origin, Shelby County, 2002-2005

	Total		White		Black		Other		Hispanic	
	Count	% change	Count	% change	Count	% change	Count	% change	Count	% change
2002	908,264	-	436,338	-	451,398	-	20,528	-	27,301	-
2003	914,478	0.7%	435,075	-0.3%	457,702	1.4%	21,700	5.7%	29,545	8.2%
2004	921,268	0.7%	433,995	-0.2%	486,012	6.2%	22,961	5.8%	32,008	8.3%
2005	928,648	0.8%	433,103	-0.2%	471,233	-3.0%	24,312	5.9%	34,696	8.4%

Births

Table i. Birth Statistics, Shelby County, 2002-2005

	Live births (Count and Rate)	Under 17 (Count and Rate)	Unmarried (Count and %)	average PNC visits	Late or no PNC (%)	Preterm (%)	LBW (%)
2002	14,109 (67.9)	819 (14.8)	7,629 (53.7)	11.2	7.9	13.5	11.4
2003	14,068 (67.8)	847 (15.2)	7,595 (53.7)	11.0	7.7	12.8	10.8
2004	14,156 (68.3)	802 (14.2)	7,719 (54.2)	-	-	12.4	10.5
2005	14,401 (69.6)	869 (15.3)	8,054 (55.6)	-	-	13.7	11.8

Table ii. Birth Statistics, White Mothers, Shelby County, 2002-2005

	Live births (Count and Rate)	Under 17 (Count and Rate)	Unmarried (Count and %)	average PNC visits	Late or no PNC (%)	Preterm (%)	LBW (%)
2002	5,488 (60.7)	137 (6.5)	1,294 (23.5)	12.5	5.4	10.7	7.1
2003	5,519 (62.0)	135 (6.4)	1,334 (24.1)	12.4	5.8	10.0	6.0
2004	5,722 (65.3)	126 (6.0)	1,504 (26.2)	-	-	9.8	6.4
2005	5,784 (67.0)	153 (7.4)	1,601 (27.6)	-	-	10.5	7.1

Table iii. Birth Statistics, Black Mothers, Shelby County, 2002-2005

	Live births (Count and Rate)	Under 17 (Count and Rate)	Unmarried (Count and %)	average PNC visits	Late or no PNC (%)	Preterm (%)	LBW (%)
2002	8,210 (73.2)	677 (20.5)	6,261 (75.6)	10.3	9.7	15.7	14.5
2003	8,105 (71.8)	705 (20.9)	6,190 (75.7)	10.2	9.1	14.8	15.2
2004	7,909 (69.9)	670 (19.5)	6,121 (76.7)	-	-	14.5	13.8
2005	8,138 (71.1)	707 (20.2)	6,392 (77.9)	-	-	16.1	17.4

Table iv. Birth Statistics, Mothers of Other Races, Shelby County, 2002-2005

	Live births (Count and Rate)	Under 17 (Count and Rate)	Unmarried (Count and %)	average PNC visits	Late or no PNC (%)	Preterm (%)	LBW (%)
2002	393 (74.0)	5 (4.7)	74 (18.8)	11.6	4.8	7.1	5.6
2003	434 (77.9)	7 (6.3)	71 (16.3)	11.5	4.4	8.5	6.9
2004	509 (87.0)	2 (1.7)	94 (18.4)	-	-	8.2	8.6
2005	441 (71.7)	9 (7.3)	61 (13.8)	-	-	12.2	10.2

Table v. Birth Statistics, Mothers of Hispanic Origin, Shelby County, 2002-2005

	Live births (Count and Rate)	Under 17 (Count and Rate)	Unmarried (Count and %)	average PNC visits	Late or no PNC (%)	Preterm (%)	LBW (%)
2002	867 (155.6)	46 (36.0)	375 (43.0)	7.6	22.8	7.6	4.8
2003	965 (162.6)	51 (36.9)	416 (43.0)	7.6	22.4	8.4	4.7
2004	1,208 (189.9)	61 (40.6)	621 (51.1)	-	-	8.6	5.2
2005	1,472 (218.2)	84 (51.9)	689 (46.6)	-	-	9.1	6.1

Infant Mortality

Table i. Infant Mortality Rate (per 1,000 live births) by Race and Hispanic Origin, Shelby County, 2002-2005

	Total	White	Black	Other	Hispanic
2002	14.0	6.7	19.8	2.3	2.7
2003	14.8	6.3	21.0	7.8	4.1
2004	12.9	6.3	17.4	18.3	-
2005	11.8	5.5	15.5	20.3	2.3

Deaths

Table i. Mortality Statistics, Total Population, Shelby County, 2002-2005

	2002	2003	2004	2005
Number of Deaths	7,926	7,769	7,520	7,878
Crude Mortality Rate	872.7	849.5	816.3	848.3
Age-adjusted Mortality Rate	1032.2	997.6	948.6	966.1
Five leading causes of death (Rate per 100,000)				
Heart Disease	313.6	303	279.1	266.7
Cancer	214.7	212.2	206.1	217.2
Cerebrovascular disease	82.4	71.6	70.8	69.5
Accidents	36.9	37.4	37.7	40.1
Chronic Lower Respiratory Disease	37.7	42.2	38.7	42.3
Five leading site-specific cancer causes of death (Rate per 100,000)				
Lung	59.3	57.3	56.7	61.3
Colorectal	24.1	25.7	22.1	20.8
Breast (in Females)	30.5	33.0	33.1	32.6
Prostate (in Males)	38.9	41.8	38.5	43.6
Pancreas	10.6	10.8	11.1	12.1

Table ii. Mortality Statistics, White Residents, Shelby County, 2002-2005

	2002	2003	2004	2005
Number of Deaths	4,063	3,883	3,869	3,914
Crude Mortality Rate	931.2	892.5	891.5	903.7
Age-adjusted Mortality Rate	874.2	828.7	813.5	820.7
Five leading causes of death (Rate per 100,000)				
Heart Disease	265.1	246.8	241.9	231.7
Cancer	190.7	181.4	169.4	168.4
Cerebrovascular disease	64.8	60.5	60.5	57.0
Chronic Lower Respiratory Disease	44.2	49.7	49.7	49.5
Accidents	37.1	37.7	37.7	40.0
Five leading site-specific cancer causes of death (Rate per 100,000)				
Lung	58.1	52.8	49.0	53.2
Colorectal	19.4	18.6	15.6	16.5
Breast (in Females)	25.7	24.1	24.4	29.4
Prostate (in Males)	25.6	27.6	27.4	27.0
Pancreas	9.4	10.0	10.4	9.9

Table iii. Mortality Statistics, Black Residents, Shelby County, 2002-2005

	2002	2003	2004	2005
Number of Deaths	3,818	3,838	3,594	3,880
Crude Mortality Rate	845.8	838.5	774.1	823.4
Age-adjusted Mortality Rate	1266.1	1254.6	1141.0	1179.6
Five leading causes of death (Rate per 100,000)				
Heart Disease	390.6	395.2	333.6	320.1
Cancer	256.1	264.6	263.7	268.4
Cerebrovascular disease	109.6	89.8	95.0	88.3
Diabetes Mellitus	54.5	64.5	48.7	61.4
HIV	35.6	22.1	24.8	25.0
Five leading site-specific cancer causes of death (Rate per 100,000)				
Lung	61.4	65.1	69.3	74.6
Colorectal	31.9	38.4	33.7	27.8
Breast (in Females)	37.0	46.0	42.8	37.2
Prostate (in Males)	64.5	71.5	60.1	78.5
Pancreas	13.2	11.6	12.2	16.0

Table iv. Mortality Statistics, Residents of Other Races, Shelby County, 2002-2005

	2002	2003	2004	2005
Number of Deaths	41	43	51	80
Crude Mortality Rate	358.5	435.6	527.4	364.0
Age-adjusted Mortality Rate	467.4	450.4	511.5	690.8
Five leading causes of death (Rate per 100,000)				
Heart Disease	150.9	99.6	164.0	191.7
Cancer	108.7	65.5	200.0	127.2
Cerebrovascular disease	51.4	-	-	97.7
Accidents	-	48.2	14.1	-
Chronic Lower Respiratory Disease	-	-	-	29.3

Table v. Mortality Statistics, Residents of Hispanic Origin, Shelby County, 2002-2005

	2002	2003	2004	2005
Number of Deaths	48	53	66	57
Crude Mortality Rate	175.8	179.4	206.2	164.3
Age-adjusted Mortality Rate	358.5	435.6	527.4	364.0
Four leading causes of death (Rate per 100,000)				
Accidents	27.7	54.5	41.4	32.8
Cancer	131.3	97.5	122.5	29.8
Assault	10.2	27.3	15.2	20.9
Heart Disease	-	93.6	147.9	114.8

Figures and Tables

Population

The population of Shelby County is ever changing. The overall population continues to increase as well as the percentage of African Americans and Hispanic residents. Tables 1-4 display the make-up of the county population from 2002 through 2005. The population of Shelby County increased by 2.2% from 2002 to 2005. The overall composition of the county changed during this four year span as well. The African American and Hispanic populations increased by 5% and 27% respectively. The white population decreased in Shelby County by 0.7%. There was also an increase in the number of residents of other races from 20,528 in 2002 to 24,312 in 2005 (18% increase). This group consists of Asians, Pacific Islanders and Native Americans. Figure 1 displays the distribution of the Shelby County population by race and the changes that occurred from 2002 to 2005.

The median age of Shelby County remained stable from 2002 through 2005 at 33. The median age divides the age distribution in an area into two equal parts: one-half of the population falling below the median value and one-half above the median value. Women tend to have a longer life-span than men resulting in a higher median age among women compared with men. Among all Shelby County residents the median age in 2005 was 35 years for women vs. 32 years for men, Table 4. This trend remains when the population is broken down by race. For example, the median age of black women is higher than that of black men. When comparing races over all, the median age among black residents is lower than that for white residents. Black residents typically die at a younger age than their white counterparts. This results in a lower median age for black residents compared to white residents, Tables 1b-4b.

Table 1a. 2002 Population Distribution by Age, Race and Hispanic Origin, Shelby County

Age	All Races			White			Black			Other			Hispanic		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	70,087	35,681	34,406	27,165	14,050	13,115	41,113	20,732	20,381	1,809	899	910	3,031	1,556	1,475
5-9	70,939	36,163	34,776	26,708	13,764	12,944	42,619	21,593	21,026	1,612	806	806	2,455	1,262	1,193
10-14	71,868	36,669	35,199	27,201	13,975	13,226	43,296	21,994	21,302	1,371	700	671	1,810	953	857
15-19	67,550	34,558	32,992	27,311	14,326	12,985	38,917	19,550	19,367	1,322	682	640	2,278	1,516	762
20-24	63,351	31,132	32,219	27,830	14,485	13,345	33,879	15,815	18,064	1,642	832	810	3,540	2,437	1,103
25-29	66,987	32,511	34,476	30,899	16,163	14,736	33,771	15,162	18,609	2,317	1,186	1,131	3,898	2,633	1,265
30-34	67,518	32,810	34,708	31,489	16,494	14,995	33,731	15,118	18,613	2,298	1,198	1,100	3,123	2,079	1,044
35-39	69,036	33,038	35,998	33,496	17,141	16,355	33,746	14,964	18,782	1,794	933	861	2,291	1,508	783
40-44	70,985	33,455	37,530	35,844	17,868	17,976	33,627	14,839	18,788	1,514	748	766	1,636	1,021	615
45-49	67,419	31,686	35,733	35,315	17,473	17,842	30,740	13,595	17,145	1,364	618	746	1,145	717	428
50-54	58,239	27,771	30,468	32,542	16,199	16,343	24,589	11,062	13,527	1,108	510	598	762	470	292
55-59	42,740	20,269	22,471	25,046	12,394	12,652	16,840	7,451	9,389	854	424	430	476	273	203
60-64	31,383	14,192	17,191	18,185	8,615	9,570	12,594	5,287	7,307	604	290	314	309	171	138
65-69	25,341	10,840	14,501	14,871	6,601	8,270	10,084	4,069	6,015	386	170	216	197	97	100
70-74	22,230	8,954	13,276	13,832	5,690	8,142	8,150	3,157	4,993	248	107	141	139	57	82
75-79	18,845	7,085	11,760	12,663	4,815	7,848	6,032	2,212	3,820	150	58	92	100	39	61
80-84	12,793	4,313	8,480	8,787	3,029	5,758	3,925	1,258	2,667	81	26	55	57	22	35
85+	10,953	2,845	8,108	7,154	1,845	5,309	3,745	977	2,768	54	23	31	54	20	34
Total	908,264	433,972	474,292	436,338	214,927	221,411	451,398	208,835	242,563	20,528	10,210	10,318	27,301	16,831	10,470

Table 1b. 2002 Median Age

	White	Black	Other	Total
Overall	37	28	30	33
Male	36	26	29	31
Female	39	30	30	34

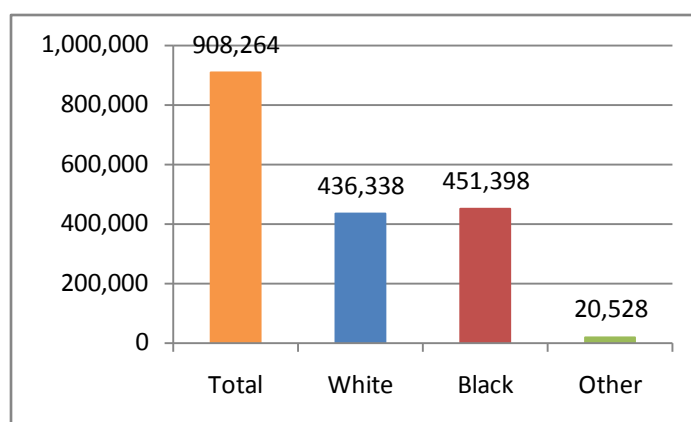
Table 1c. 2002 Race Distribution

Table 2a. 2003 Population Distribution by Age, Race and Hispanic Origin, Shelby County

Age	All Races			White			Black			Other			Hispanic		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	70,941	36,131	34,810	27,242	14,091	13,151	41,797	21,089	20,708	1,902	951	951	3,295	1,697	1,598
5-9	69,727	35,511	34,216	26,357	13,596	12,761	41,626	21,046	20,580	1,744	869	875	2,764	1,417	1,347
10-14	72,393	36,952	35,441	26,937	13,850	13,087	44,005	22,367	21,638	1,451	735	716	1,993	1,043	950
15-19	68,383	34,961	33,422	27,132	14,228	12,904	39,891	20,029	19,862	1,360	704	656	2,363	1,584	779
20-24	64,148	31,608	32,540	27,950	14,549	13,401	34,489	16,195	18,294	1,709	864	845	3,654	2,507	1,147
25-29	66,259	32,075	34,184	30,382	15,891	14,491	33,556	15,005	18,551	2,321	1,179	1,142	4,217	2,863	1,354
30-34	67,940	33,056	34,884	31,339	16,455	14,884	34,102	15,310	18,792	2,499	1,291	1,208	3,460	2,306	1,154
35-39	67,695	32,486	35,209	32,307	16,640	15,667	33,459	14,842	18,617	1,929	1,004	925	2,498	1,650	848
40-44	70,607	33,367	37,240	35,294	17,663	17,631	33,726	14,910	18,816	1,587	794	793	1,788	1,135	653
45-49	68,245	32,027	36,218	35,212	17,402	17,810	31,603	13,966	17,637	1,430	659	771	1,244	772	472
50-54	60,012	28,503	31,509	32,801	16,291	16,510	26,018	11,671	14,347	1,193	541	652	843	528	315
55-59	45,139	21,399	23,740	26,245	12,985	13,260	17,974	7,964	10,010	920	450	470	525	306	219
60-64	32,462	14,800	17,662	18,735	8,939	9,796	13,063	5,539	7,524	664	322	342	332	184	148
65-69	25,546	10,957	14,589	14,853	6,613	8,240	10,274	4,157	6,117	419	187	232	213	108	105
70-74	21,892	8,830	13,062	13,399	5,532	7,867	8,225	3,183	5,042	268	115	153	142	59	83
75-79	18,653	6,985	11,668	12,437	4,713	7,724	6,057	2,212	3,845	159	60	99	101	38	63
80-84	13,184	4,454	8,730	9,070	3,121	5,949	4,028	1,304	2,724	86	29	57	60	23	37
85+	11,252	2,916	8,336	7,384	1,920	5,464	3,809	973	2,836	59	23	36	53	19	34
Total	914,478	437,018	477,460	435,076	214,479	220,597	457,702	211,762	245,940	21,700	10,777	10,923	29,545	18,239	11,306

Table 2b. 2003 Median Age

	White	Black	Other	Total
Overall	38	29	30	33
Male	36	26	30	31
Female	39	30	31	34

Table 2c. 2003 Race Distribution

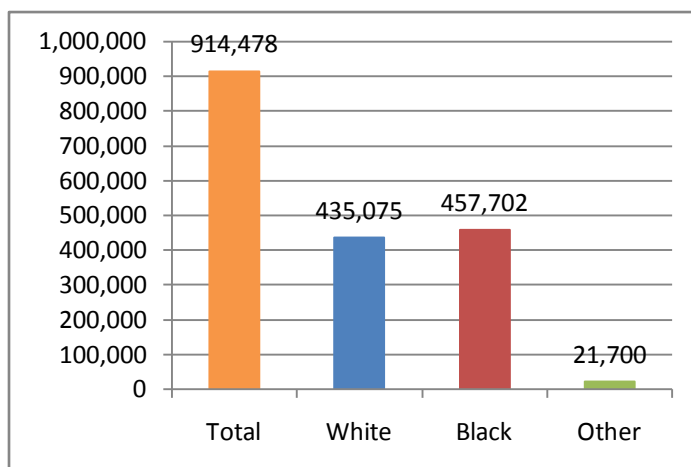


Table 3a. 2004 Population Distribution by Age, Race and Hispanic Origin, Shelby County

Age	Total			White			Black			Other			Hispanic		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	71,810	36,589	35,221	27,319	14,132	13,187	42,490	21,451	21,039	2,001	1,006	995	3,584	1,852	1,732
5-9	68,554	34,879	33,675	26,011	13,430	12,581	40,656	20,513	20,143	1,887	936	951	3,112	1,592	1,520
10-14	72,936	37,243	35,693	26,675	13,725	12,950	44,725	22,746	21,979	1,536	772	764	2,194	1,141	1,053
15-19	69,242	35,375	33,867	26,955	14,131	12,824	40,889	20,519	20,370	1,398	725	673	2,453	1,656	797
20-24	64,963	32,097	32,866	28,070	14,614	13,456	35,113	16,585	18,528	1,780	898	882	3,771	2,580	1,191
25-29	65,542	31,645	33,897	29,873	15,623	14,250	33,343	14,849	18,494	2,326	1,173	1,153	4,562	3,112	1,450
30-34	68,382	33,309	35,073	31,188	16,415	14,773	34,477	15,504	18,973	2,717	1,390	1,327	3,833	2,557	1,276
35-39	66,411	31,956	34,455	31,162	16,154	15,008	33,174	14,721	18,453	2,075	1,081	994	2,726	1,807	919
40-44	70,246	33,286	36,960	34,753	17,460	17,293	33,828	14,983	18,845	1,665	843	822	1,955	1,262	693
45-49	69,100	32,382	36,718	35,109	17,331	17,778	32,490	14,347	18,143	1,501	704	797	1,352	832	520
50-54	61,879	29,272	32,607	33,063	16,384	16,679	27,531	12,314	15,217	1,285	574	711	934	593	341
55-59	47,679	22,595	25,084	27,503	13,605	13,898	19,184	8,512	10,672	992	478	514	580	343	237
60-64	33,584	15,437	18,147	19,303	9,276	10,027	13,551	5,803	7,748	730	358	372	357	197	160
65-69	25,757	11,078	14,679	14,834	6,624	8,210	10,468	4,248	6,220	455	206	249	232	121	111
70-74	21,568	8,710	12,858	12,978	5,377	7,601	8,300	3,209	5,091	290	124	166	146	62	84
75-79	18,466	6,888	11,578	12,215	4,614	7,601	6,083	2,213	3,870	168	61	107	104	38	66
80-84	13,589	4,601	8,988	9,363	3,216	6,147	4,135	1,352	2,783	91	33	58	62	23	39
85+	11,560	2,989	8,571	7,621	1,997	5,624	3,875	969	2,906	64	23	41	51	18	33
Total	921,268	440,331	480,937	433,995	214,108	219,887	464,312	214,838	249,474	22,961	11,385	11,576	32,008	19,786	12,222

Table 3b. 2004 Median Age

	White	Black	Other	Total
Overall	38	29	31	33
Male	36	26	30	31
Female	40	30	31	35

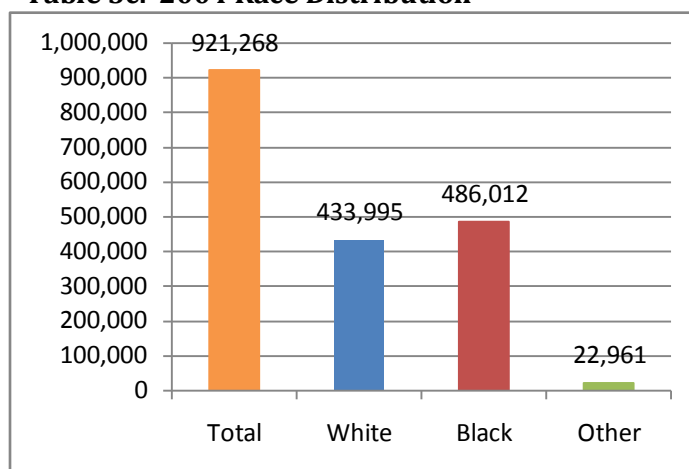
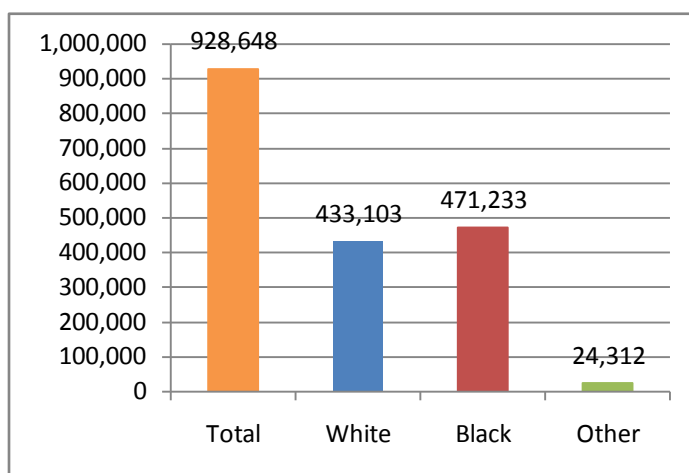
Table 3c. 2004 Race Distribution

Table 4a. 2005 Population Distribution by Age, Race and Hispanic Origin, Shelby County

Age	All Races			White			Black			Other			Hispanic		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	72,696	37,057	35,639	27,396	14,173	13,223	43,196	21,820	21,376	2,104	1,064	1,040	3,896	2,020	1,876
5-9	67,420	34,268	33,152	25,670	13,266	12,404	39,708	19,993	19,715	2,042	1,009	1,033	3,504	1,788	1,716
10-14	73,499	37,544	35,955	26,416	13,602	12,814	45,457	23,132	22,325	1,626	810	816	2,416	1,248	1,168
15-19	70,129	35,805	34,324	26,779	14,035	12,744	41,912	21,022	20,890	1,438	748	690	2,546	1,731	815
20-24	65,792	32,595	33,197	28,191	14,679	13,512	35,748	16,984	18,764	1,853	932	921	3,893	2,655	1,238
25-29	64,834	31,221	33,613	29,373	15,360	14,013	33,131	14,695	18,436	2,330	1,166	1,164	4,936	3,384	1,552
30-34	68,851	33,574	35,277	31,040	16,376	14,664	34,856	15,701	19,155	2,955	1,497	1,458	4,246	2,835	1,411
35-39	65,182	31,447	33,735	30,058	15,682	14,376	32,892	14,601	18,291	2,232	1,164	1,068	2,973	1,978	995
40-44	69,897	33,210	36,687	34,222	17,260	16,962	33,928	15,055	18,873	1,747	895	852	2,139	1,403	736
45-49	69,983	32,749	37,234	35,007	17,260	17,747	33,402	14,738	18,664	1,574	751	823	1,469	896	573
50-54	63,843	30,078	33,765	33,327	16,477	16,850	29,132	12,992	16,140	1,384	609	775	1,034	666	368
55-59	50,365	23,859	26,506	28,820	14,254	14,566	20,475	9,097	11,378	1,070	508	562	640	384	256
60-64	34,751	16,104	18,647	19,890	9,626	10,264	14,058	6,080	7,978	803	398	405	383	211	172
65-69	25,974	11,202	14,772	14,815	6,635	8,180	10,665	4,340	6,325	494	227	267	251	135	116
70-74	21,261	8,596	12,665	12,571	5,227	7,344	8,376	3,235	5,141	314	134	180	149	64	85
75-79	18,284	6,793	11,491	11,996	4,516	7,480	6,109	2,214	3,895	179	63	116	106	38	68
80-84	14,007	4,754	9,253	9,665	3,314	6,351	4,245	1,402	2,843	97	38	59	65	24	41
85+	11,880	3,066	8,814	7,867	2,078	5,789	3,943	965	2,978	70	23	47	50	17	33
Total	928,648	443,922	484,726	433,103	213,820	219,283	471,233	218,066	253,167	24,312	12,036	12,276	34,696	21,477	13,219

Table 4b. 2005 Median Age

	White	Black	Other	Total
Overall	38	29	31	33
Male	36	27	31	32
Female	40	31	31	35

Table 4c. 2005 Race Distribution

Births in Shelby County, 2002-2005

Birth Rate

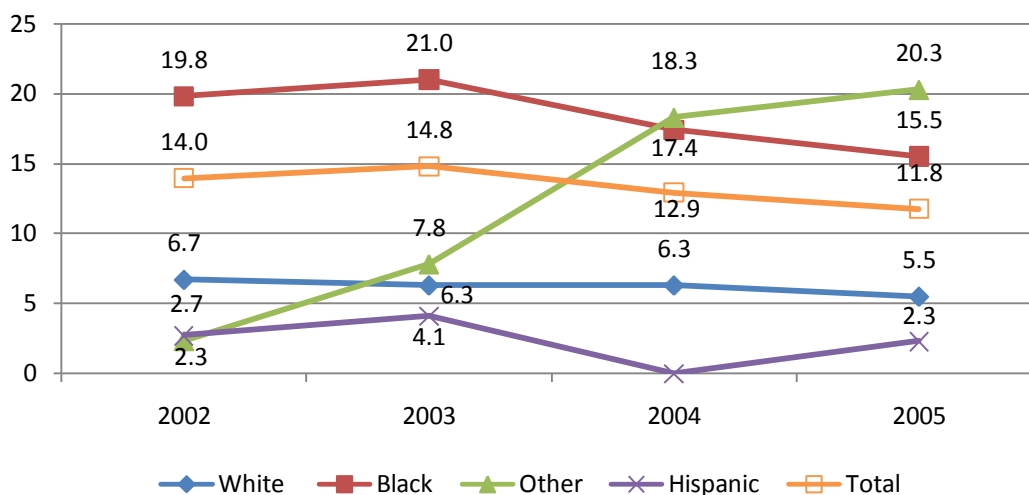
The number of births in Shelby County increased by 2.0% from 2002 to 2005 rising from 14,201 to 14,480 respectively. The birth rate presented in Table 5 is the number of births to women between 10 to 44 years of age per 1,000 women in the population ages 10 to 44. This reflects the number of live births that occurred each year per 1,000 women in the community who are of childbearing age.

Table 5. Number of Births and Birth Rate by Race (Per 1,000 women of childbearing age, 10-44) and Hispanic Origin of Mother, Shelby County, 2002-2005

	Total		White		Black		Other		Hispanic	
Year	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002	14201	68.3	5501	60.9	8285	73.8	394	74.2	872	156.5
2003	14155	68.2	5534	62.2	8176	72.4	435	78.1	967	162.9
2004	14252	68.8	5739	65.5	7985	70.3	512	87.5	1215	191.0
2005	14480	70.0	5795	67.2	8206	71.7	441	71.7	1478	219.1

The birth rate of the county as a whole increased from 68.3 births/1,000 women in 2002 to 70.0 births/1,000 women in 2005. There was an increase in birth rate among the white and the Hispanic populations. The black population and those of other races experienced a decrease in the birth rate from 2002-2005 as shown in Figure 1.

Figure 1. Birth Rate by Race and Hispanic Origin of Mother, Shelby County, 2002-2005



Adolescent Pregnancy

Adolescent pregnancy can be associated with long-term effects for both the mother and child. Mothers who give birth during adolescence (age 10 to 17) are less likely to complete high school which can lead to struggles in attaining employment and lower earning potential throughout life. In addition, adolescent mothers are frequently plagued by poverty and other adverse socioeconomic circumstances. Pregnancies among adolescents are at a greater risk of infant mortality and low birth weight than

pregnancies among older women. Children born to adolescent mothers are more likely to grow up among poverty and lower levels of emotional support and are less likely to attain high school diplomas.

Table 6 presents the trend in births to adolescent mothers in Shelby County from 2002-2005. Overall the birth rates among mothers 10 to 17 years of age have remained fairly stable with small fluctuations from year to year. The rates of births among females 18 to 19 years of age have increased over the 4 year period overall and among white, black and Hispanic females.

Table 6. Number of Births and Birth Rate (per 100,000) by Race to Adolescent Mothers (10 to 19 Years of Age) by Race and Hispanic Origin, Shelby County, 2002-2005

	Total		White		Black		Other		Hispanic	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002										
Age 10-17	819	14.8	137	14.8	677	20.5	5	4.7	46	36.0
Age 10-14	73	2.1	6	0.5	66	3.1	1	1.5	5	5.8
Age 15-17	747	36.4	131	16.4	611	52.0	5	10.4	41	97.2
Age 18-19	1312	99.2	306	61.1	993	130.3	13	43.0	90	264.7
2003										
Age 10-17	847	15.2	135	6.4	705	20.9	7	6.3	51	36.9
Age 10-14	70	2.0	5	0.4	64	3.0	1	1.4	1	1.1
Age 15-17	777	37.4	130	16.4	641	53.2	6	15.3	50	116.0
Age 18-19	1269	94.7	302	60.7	959	122.7	8	30.4	88	252.9
2004										
Age 10-17	802	14.2	122	5.9	670	19.5	10	8.6	61	40.6
Age 10-14	76	2.1	4	0.3	71	3.2	1	0.0	4	3.8
Age 15-17	726	34.4	118	15.0	599	48.5	9	22.3	57	129.3
Age 18-19	1367	100.6	316	63.9	1037	129.4	14	52.0	128	359.6
2005										
Age 10-17	869	15.3	153	7.4	707	20.2	9	7.3	84	51.9
Age 10-14	66	1.8	7	0.5	59	2.6	0	0.0	6	5.1
Age 15-17	803	37.6	146	18.7	648	51.2	9	21.7	78	172.6
Age 18-19	1430	103.8	335	68.1	1086	132.1	9	32.6	143	393.9

The Healthy People 2010 goal for births to females 15 to 17 years of age is 43 per 1000 live births. In Shelby County the birth rate among females ages 15 to 17 in 2005 was 37.6 per 1000 live births. Shelby County currently meets the Healthy People 2010 objective for adolescent births.

● ● ●
Adolescent Pregnancies (Age 15-17)
Healthy People 2010 Goal: 43 per 1,000 live births
Shelby County 2005: 37.6 per 1,000 live births
 ● ● ●

Figure 2. Percent of births to mothers 10-17 Years of Age by Race and Hispanic Origin, Shelby County, 2002-2005

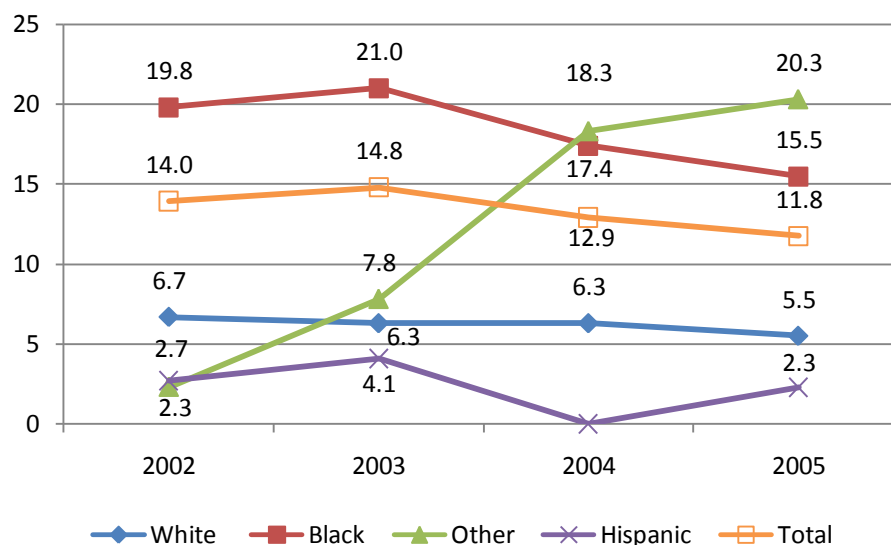
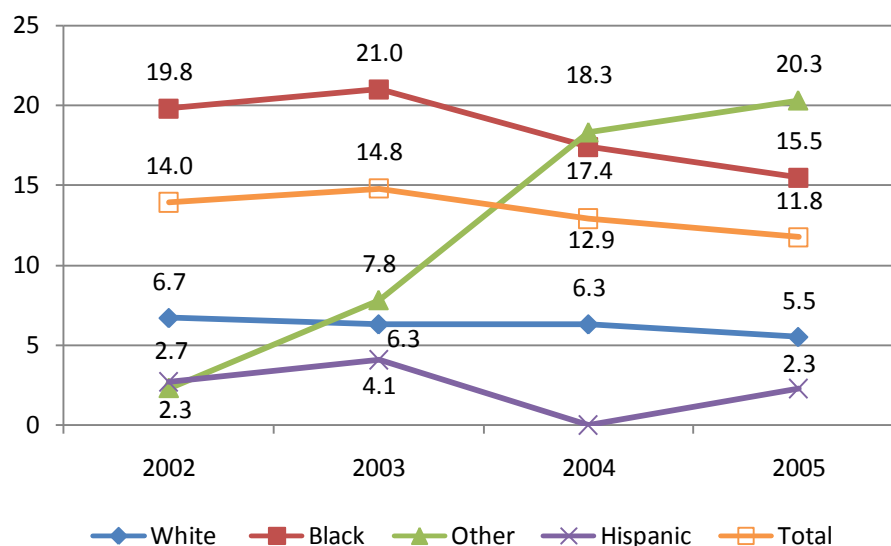


Figure 3. Percent of Births to Mothers Less than 20 Years of Age by Race and Hispanic Origin, Shelby County, 2002-2005



It appears that the birth rate for mothers under 20 has risen overall from 2002-2005. This is due to an increase in the number of births among women 18 and 19 years old as the rate for those 17 and under has remained relatively stable over the 4 year period.

Unmarried Women

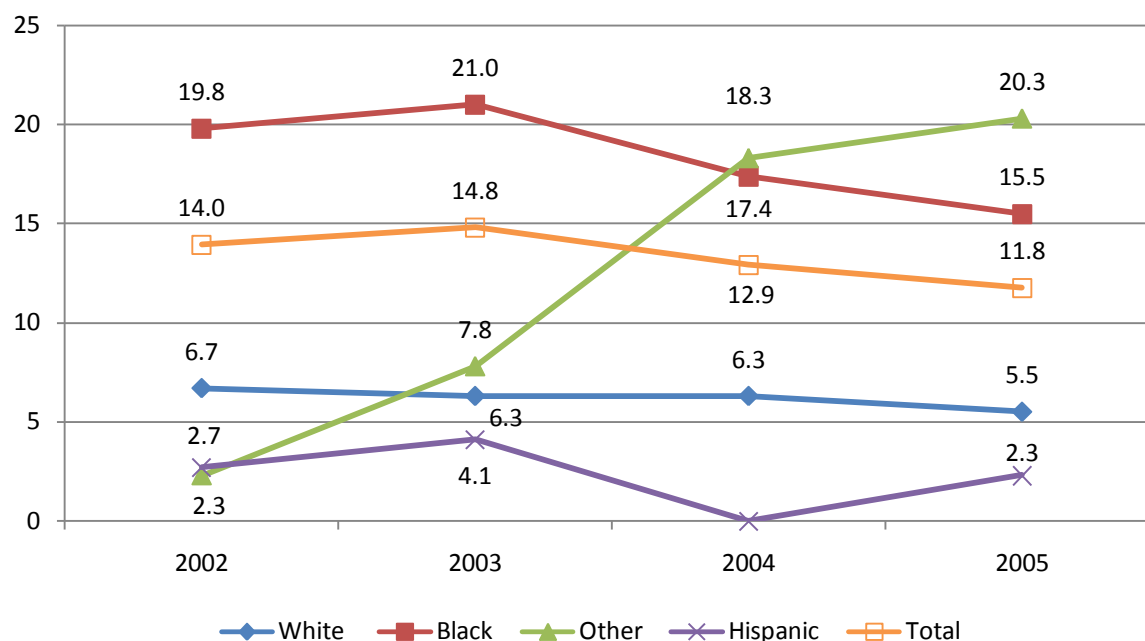
Women who are not married at the time that they give birth may be less likely to have a stable social environment than women who are married. Children born to unmarried women are more likely to have poor outcomes such as low birth weight and infant mortality. In addition, these children are more likely to be born into poverty.¹

The overall percentage of births to unmarried mothers increased in Shelby County since 2002. The percentage of births to unmarried women rose by 3.5% from 2002 to 2005. Among white women, the percentage of births out of wedlock increased by 17.4% in the 4 year period. Among black and Hispanic women the percentages rose by 3.0% and 8.4% respectively. The percentage of births to unmarried women decreased only among other races, from 18.8% in 2002 down to 13.8% in 2005.

Table 7. Number of Births and Percentage to Unmarried Women by Race and Hispanic Origin, Shelby County, 2002-2005

	Total			White			Black			Other			Hispanic		
	count	%	% change	count	%	% change	count	%	% change	count	%	% change	count	%	% change
2002	7629	53.7%	-	1294	23.5%	-	6261	75.6%	-	74	18.8%	-	375	43.0%	-
2003	7595	53.7%	-0.1	1334	24.1%	0.2	6190	75.7%	2.5	71	16.3%	-13.1	416	43.0%	0.0
2004	7719	54.2%	0.9	1504	26.2%	1.3	6121	76.7%	8.7	94	18.4%	18.8	621	51.1%	18.8
2005	8054	55.6%	2.7	1601	27.6%	1.6	6392	77.9%	5.4	61	13.8%	-24.7	689	46.6%	-8.8

Figure 4. Percent of Live Births to Unmarried Women by Race and Hispanic Origin, Shelby County, 2002-2005



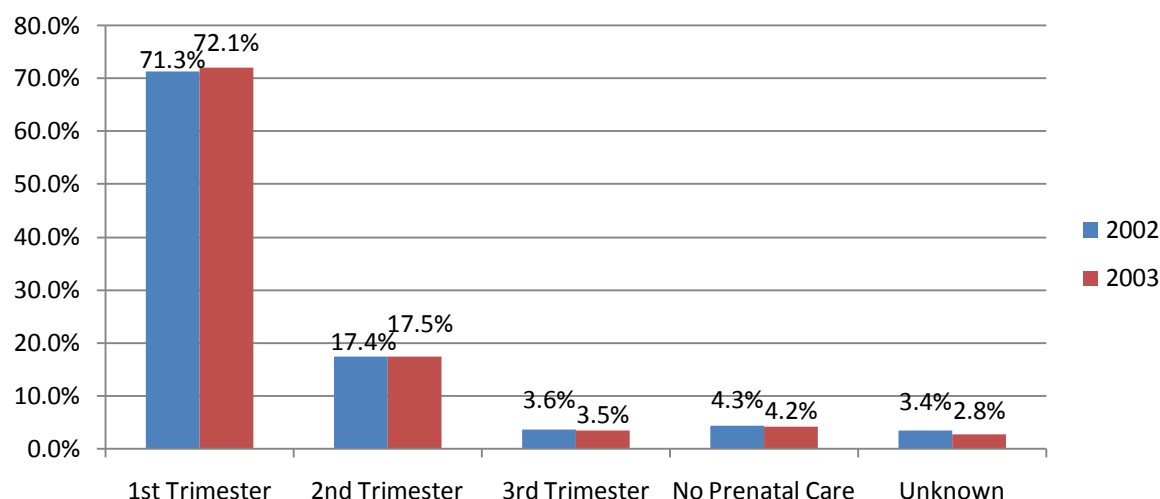
Prenatal Care

Prenatal care (PNC) refers to the medical care recommended for women during pregnancy. The aim of prenatal care is to detect any potential problems early, to prevent them if possible and to direct any high-risk situations to the appropriate specialist, hospital, etc. The American College of Obstetrics and Gynecology recommends at least 13 prenatal visits in a normal 9 month pregnancy; one visit per month during the first 28 weeks, biweekly visits from week 28 to 36 of pregnancy and weekly visits after week 36 until delivery. Women who see a health care provider regularly during pregnancy have healthier babies, are less likely to deliver prematurely and are less likely to have other serious problems related to pregnancy.

Due to the birth certificate change implemented in 2004, the 2004-2005 data contain a large percentage of unknowns, therefore only data from 2002-2003 is presented for prenatal care.

Figure 5 displays the distribution of initiation of PNC by trimester for each race and for women of Hispanic origin. Women most at risk for poor outcomes are those initiating PNC in the 3rd trimester or receiving no care at all.

Figure 5. Distribution of Prenatal Care received by Shelby County Mothers, 2002-2003

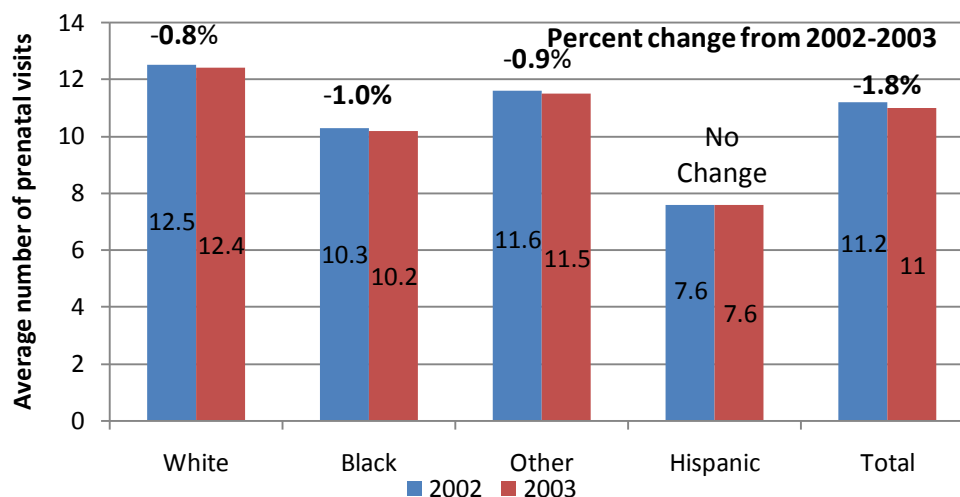


In Shelby County, the average number of prenatal visits decreased from 11.2 in 2002 to 11.0 in 2003. The average number of PNC visits decreased for each race from 2002 to 2003. For women of Hispanic origin, the average number of PNC visits remained constant.

Table 8. Average Number of Prenatal Care Visits by Race and Hispanic Origin, Shelby County, 2002-2005

	Total	White	Black	Other	Hispanic
2002	11.2	12.5	10.3	11.6	7.6
2003	11.0	12.4	10.2	11.5	7.6
2004	-	-	-	-	-
2005	-	-	-	-	-

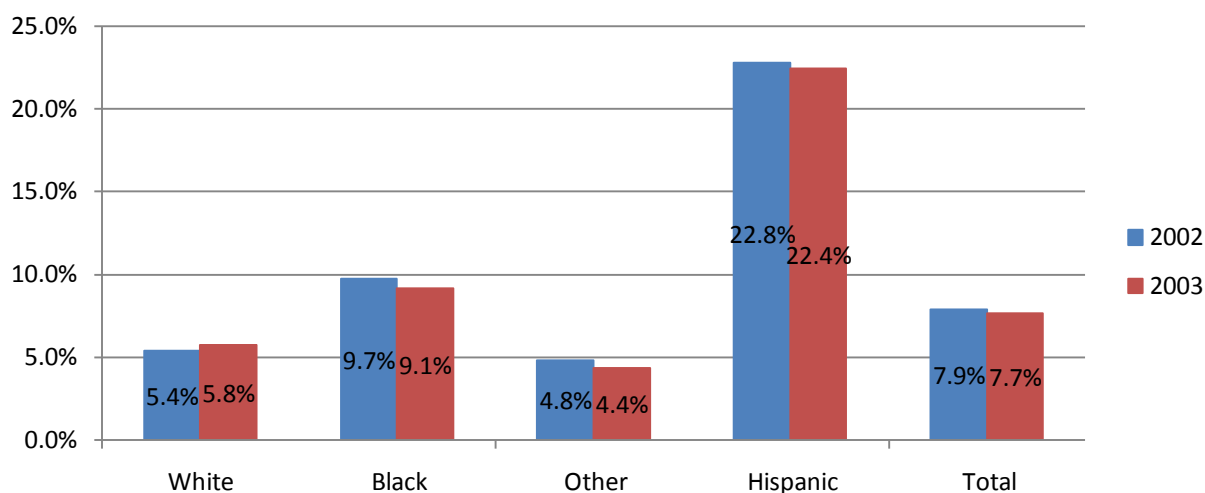
Figure 6. Average Number of Prenatal Visits by Race and Hispanic Origin, Shelby County, 2002-2003



The population of mothers that are at highest risk of poor pregnancy outcomes are among those receiving late or no prenatal care. Not enrolling in prenatal care may be a reflection of the educational status, socioeconomic status or lack of insurance of the mother at the time of pregnancy. As mentioned previously, children born into poverty may have great health problems and limited social and emotional support compared to children not born into poverty.

As illustrated in Figure 7, it appears as though the percentage of women receiving little or no prenatal care had declined in 2003 relative to 2002.

Figure 7. Percentage of Live Births to Women Receiving Late or No Prenatal Care by Race and Hispanic Origin, Shelby County, 2002-2003



Premature Births

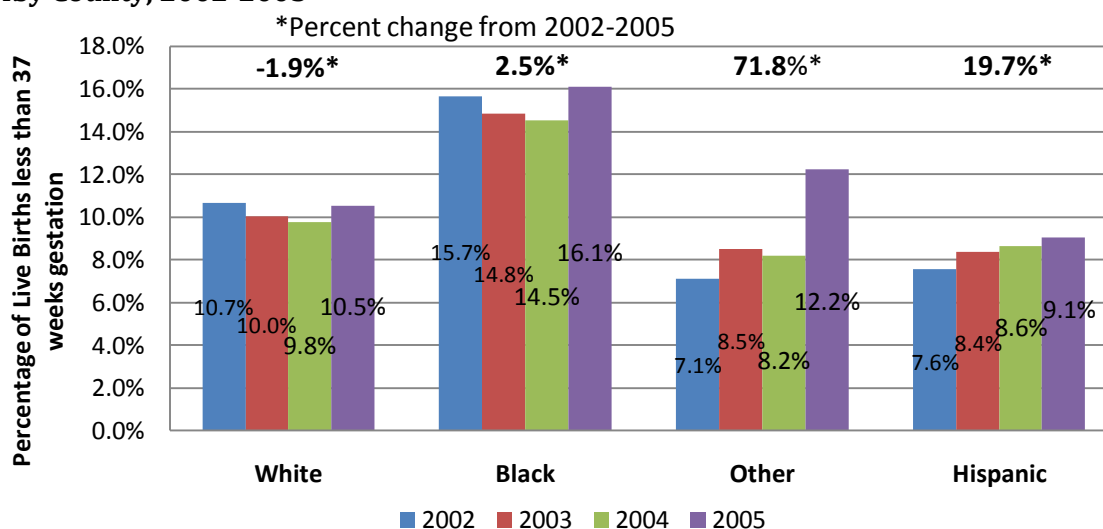
Infants born before 37 weeks gestation are considered premature. Prematurity can lead to many complications in the newborn including death. Some of the immediate clinical problems among premature newborns include respiratory distress syndrome, bleeding in the brain, necrotizing enterocolitis (death of intestinal tissue) and retinopathy (scarring or detachment of the retina). Prematurity may also lead to many long term effects including learning problems, poor coordination or more serious brain damage, blindness and chronic lung problems. Medical costs of premature infants are approximately 10 times more than infants delivered at term and premature infants stay about 9 times longer in the hospital after birth.

In Shelby County, the percentage of babies born before 37 weeks has remained relatively stable overall (13.5% in 2002 vs. 13.7% in 2005). From 2002-2005, prematurity decreased among whites by approximately 2%, for blacks prematurity increased approximately 2.5%, other races experienced an increase of approximately 72%. The percent of premature babies born to mothers of Hispanic origin increased by 20% from 2002 to 2005. The goal for Healthy People 2010 is to reduce the number of premature births to 7.6% of all births. As of 2005, Shelby County is not meeting this goal with 13.7% of all births being premature.

Table 9. Percent Premature Live Births (less than 37 weeks gestation) by Race and Hispanic Origin, Shelby County, 2002-2005

	2002		2003		2004		2005	
	Percentage	Percent Change	Percentage	Percent Change	Percentage	Percent Change	Percentage	Percent Change
Total	13.5%		12.8%	-5.6%	12.4%	-3.0%	13.7%	10.8%
White	10.7%	-	10.0%	-6.0%	9.8%	-2.7%	10.5%	7.9%
Black	15.7%	-	14.8%	-5.4%	14.5%	-2.0%	16.1%	10.7%
Other	7.1%	-	8.5%	19.7%	8.2%	-3.6%	12.2%	49.3%
Hispanic	7.6%	-	8.4%	10.7%	8.6%	3.2%	9.1%	4.9%

Figure 8. Percent of Premature Live Births and Percent Change by Race and Hispanic Origin, Shelby County, 2002-2005



Low Birth Weight

Low birth weight (LBW) is defined as a birth weight less than 2500 grams or 5.5lbs. As with prematurity, low birth weight is related to infant mortality and poor pregnancy outcomes. Low birth weight is associated with long-term disabilities, such as cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities. In the US, the cost for LBW babies accounts for more than half of costs incurred for all newborns despite the fact that LBW occurs in a small proportion of births.

In Shelby County, the percentage of low birth weight babies has been relatively unchanged overall (11.4% in 2002 vs. 11.8% in 2005). However, when broken down by race and Hispanic origin, disparities in percentage of low birth weight babies emerge. Among whites, the percent of low birth weight infants remained relatively stable at 7.1%. In the black population, the percent of LBW infants increased from 14.5% in 2002 to 17.4% in 2005 with slight decreases during the intermittent years. In other races, the percentage of LBW infants almost doubled from 5.4% in 2002 to 10.2% in 2005. This number may also be affected by changes in reporting since other populations make up a very small percentage of total births in Shelby County. Women of Hispanic origin experienced an increase in the percentage of LBW infants from 4.8% in 2002 to 6.1% in 2005. The percent of LBW and percent change from 2003 to 2005 is presented in Table 10 and Figure 9.

Table 10. Percent of Low Birth Weight (less than 2500 grams) Live Births by Race and Hispanic Origin, Shelby County, 2002-2003

	2002		2003		2004		2005	
	Percentage	Percent Change	Percentage	Percent Change	Percentage	Percent Change	Percentage	Percent Change
Total	11.4%	-	10.8%	-5.3%	10.6%	-1.9%	11.8%	11.3%
White	7.1%	-	6.0%	-15.9%	6.4%	7.2%	7.1%	11.4%
Black	14.5%	-	14.2%	-1.7%	13.8%	-3.1%	17.4%	26.4%
Other	5.6%	-	6.9%	23.5%	8.6%	24.6%	10.2%	18.7%
Hispanic	4.8%	-	4.7%	-3.4%	5.2%	11.4%	6.1%	17.4%



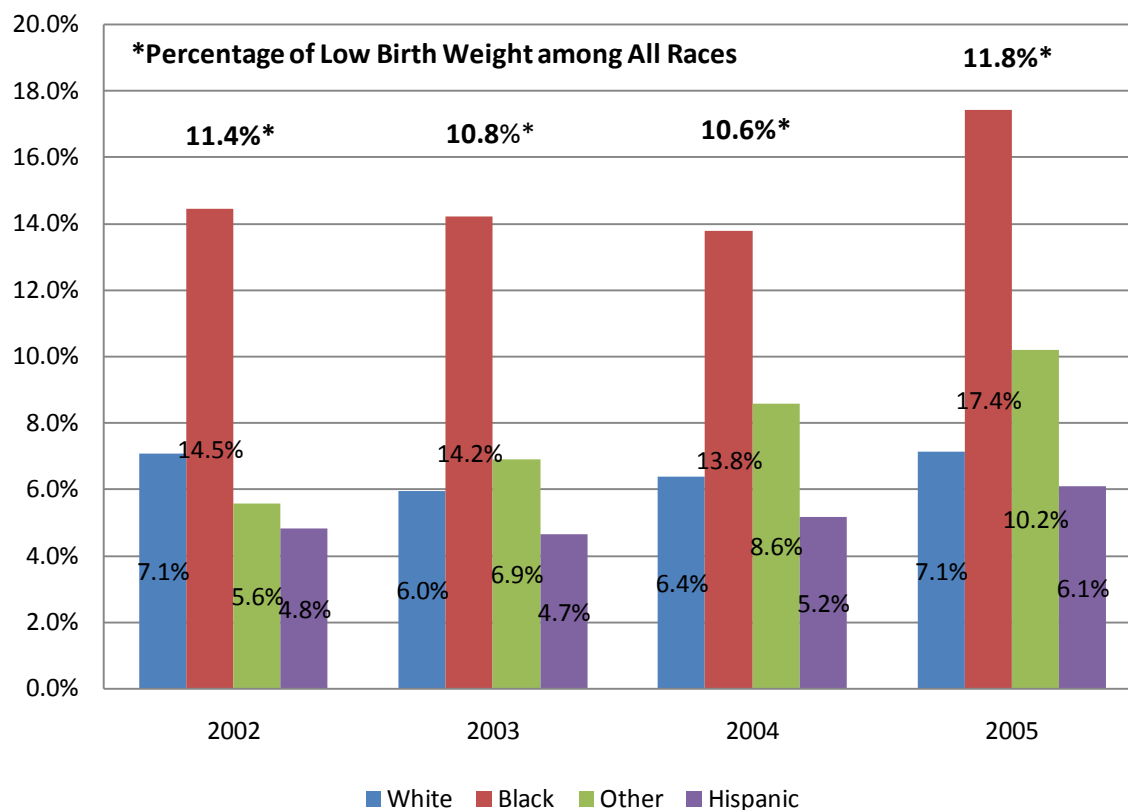

Premature Births (<37 Weeks Gestational Age)
Healthy People 2010 Goal: 7.6% of live births
Shelby County 2005: 13.7% of live births


Figure 9. Percent of Low Birth Weight Live Births by Race and Hispanic Origin, Shelby County, 2002-2005



The Healthy People 2010 objective regarding low birth weight infants is to reduce the percentage to 5.0% of all births. In Shelby County the 2005 rate must be reduced by 58% to reach this goal.

Low Birth Weight Live Births (<2500 grams)
Healthy People 2010 Goal: 5.0% of live births
Shelby County 2005: 11.8% of live births

Deaths in Shelby County, 2002-2005

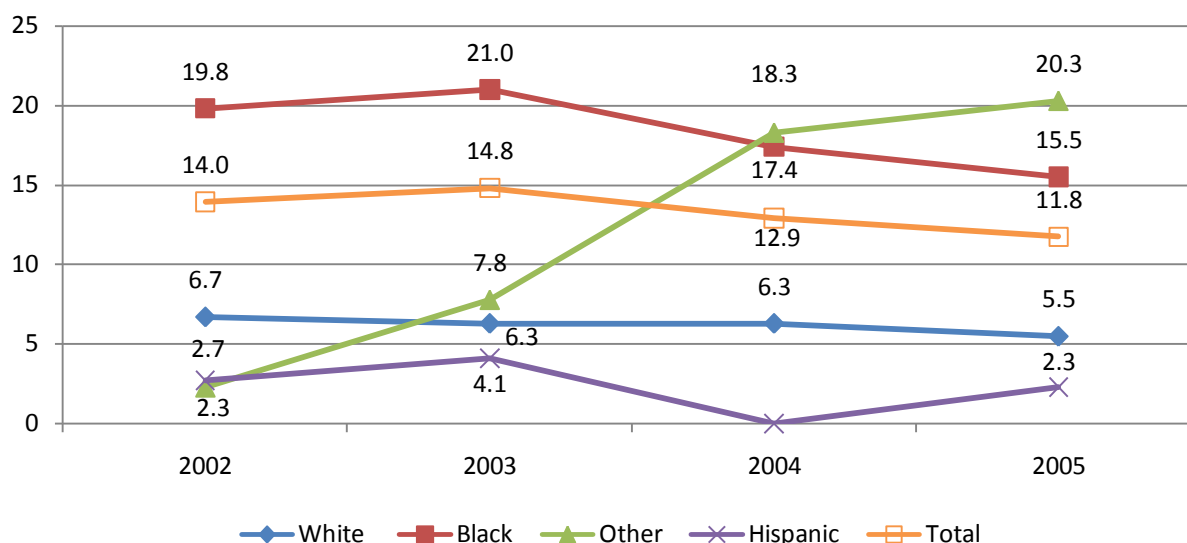
Infant Deaths

Infant deaths are defined as death within the first year of life. The Infant Mortality Rate (IMR) is calculated as the number of infant deaths per 1,000 live births. From 2002-2005 the number of infant deaths decreased approximately 17%. There is a disparity in the rate of infant deaths between black and white mothers. Black mothers have about three times higher rates of infant mortality than white mothers in Shelby County. Factors contributing to infant death include prematurity, low birth weight, congenital abnormalities and Sudden Infant Death Syndrome (SIDS).

Table 11. Number of Infant Deaths and Infant Mortality Rates (per 1,000 live births) by Race and Hispanic Origin, Shelby County, 2002-2005

	Total		White		Black		Other		Hispanic	
	count	rate	count	rate	count	rate	count	rate	count	rate
2002	202	14.0	37	6.7	164	19.8	-	-	4	2.7
2003	211	14.8	35	6.3	172	21.0	4	7.8	5	4.1
2004	183	12.9	36	6.3	139	17.4	8	18.3	-	-
2005	167	11.8	32	5.5	127	15.5	8	20.3	-	-

Figure 10. Infant Mortality Rate by Race and Hispanic Origin, Shelby County, 2002-2005



In Shelby County, the overall IMR in 2005 was 11.8 per 1,000 live births. This rate is approximately 2.5 times higher than the Healthy People goal of 4.5 per 1,000 live births.

Infant Mortality Rate
Healthy People 2010 Goal: 4.5 infant deaths per 1,000 live births
Shelby County 2005: 11.8 infant deaths per 1,000 live births

Resident Deaths

The mortality rate is measured as the number of deaths in the population per 100,000 people in the population. The mortality rate encompasses all causes of death for residents over 1 year. The infant mortality deaths are not included in the following tables for all resident deaths because they are calculated by different methods than the overall mortality rate.

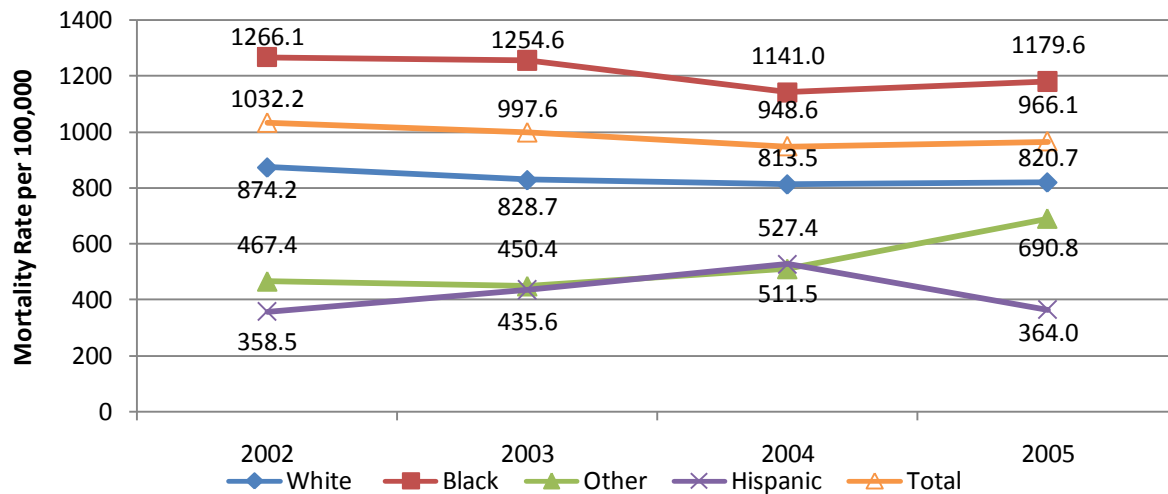
Both the crude mortality rate and the age-adjusted mortality rates are presented in Table 12. The crude rate is calculated as the number of deaths per 100,000 people in the population. The age-adjusted rates are applied to a standardized age distribution for the United States in order to eliminate differences in the observed rates that result from age differences in population composition. The age-adjusted rates can be used for comparison to the State age-adjusted rates or US age-adjusted rates.

For Shelby County, the crude mortality rates for white residents are higher than the age-adjusted rates and for black residents the crude rates are lower than the age-adjusted rates. This has to do with the age distribution of each population. White residents tend to die at higher ages than black residents, so when the rates are adjusted for age, these differences emerge. Age-adjusted rates should be viewed as relative rates for comparing different areas.

Looking at the age-adjusted rates for comparison, the overall mortality rate of Shelby County residents decreased slightly from 2002 to 2005. The trend in mortality rate for black residents was an approximately 7% decrease from 2002 to 2005, for whites the decrease in mortality rate was approximately 6.5%. Among residents of Hispanic origin the trend in mortality rate was an increase of about 10% over the four year span.

Table 12. Number of Resident Deaths, Crude Mortality Rate and Age-Adjusted Mortality Rate (per 100,000) by Race and Hispanic Origin, Shelby County, 2002-2005

	White			Black			Other			Hispanic			Total		
	Count	Crude Rate	Rate	Count	Crude Rate	Rate	Count	Crude Rate	Rate	Count	Crude Rate	Rate	Count	Crude Rate	Rate
2002	4063	931.2	874.2	3818	845.8	1266.1	41	199.7	467.4	48	358.5	358.5	7926	175.8	1032.2
2003	3883	892.5	828.7	3838	838.5	1254.6	43	198.2	450.4	53	435.6	435.6	7768	179.4	997.6
2004	3869	891.5	813.5	3594	774.1	1141.0	51	222.1	511.5	66	527.4	527.4	7520	206.2	948.6
2005	3914	903.7	820.7	3880	823.4	1179.6	80	329.1	690.8	57	364.0	364.0	7878	164.3	966.1

Figure 11. Age-Adjusted Mortality Rate by Race or Hispanic Origin, Shelby County, 2002-2005

Top Ten Causes of Death

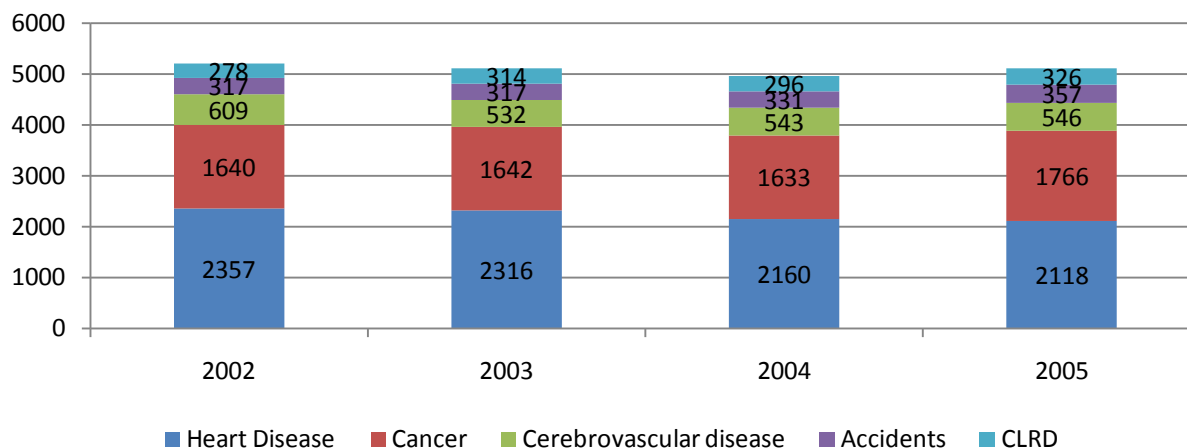
The most common cause of death among all Shelby County residents is heart disease. This category includes acute rheumatic fever and chronic rheumatic heart disease, hypertensive heart disease, hypertensive heart and renal disease, ischemic heart diseases including heart attack and endocarditis and acute myocarditis. Heart disease accounts for almost 30% of all deaths each year. Following heart disease, cancer is the second most common cause of death among Shelby County residents causing approximately 20% of all deaths each year. Third is cerebrovascular disease which includes stroke, followed by accidents, chronic lower respiratory disease (bronchitis, asthma and emphysema) and diabetes mellitus.

The next set of common causes of death among the general population fluctuate from year to year including influenza and pneumonia, Alzheimer's disease, assault (homicide), HIV, septicemia and essential hypertension.

Table 13 gives the number of deaths and mortality rate for each cause among all Shelby County residents from 2002-2005. The number of deaths and mortality rate per race is broken down in Tables 14-17. Following heart disease, cancer and cerebrovascular disease, the leading causes of death vary between races in Shelby County. The next three most common causes among white residents are chronic lower respiratory disease (CLRD), accidents and Alzheimer's disease, where among black residents the next three leading causes are diabetes mellitus, HIV and accidents.

Table 13. Number of Resident Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death, Shelby County, 2002-2005

	2002			2003			2004			2005		
Cause of Death	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Heart Disease	1	2357	313.6	1	2316	303.0	1	2160	279.1	1	2118	266.7
Cancer	2	1640	214.7	2	1642	212.2	2	1633	206.1	2	1766	217.2
Cerebrovascular disease	3	609	82.4	3	532	71.6	3	543	70.8	3	546	69.5
Accidents	4	317	36.9	4	317	37.4	4	331	37.7	4	357	40.1
Chronic Lower Respiratory Disease	5	278	37.7	5	314	42.2	5	296	38.7	5	326	42.3
Diabetes Mellitus	6	231	30.2	6	255	33.2	6	224	28.7	6	283	35.0
Influenza and Pneumonia	7	203	27.4	8	193	25.9	8	199	26.0	9	148	18.6
Alzheimer's Disease	8	192	27.1	7	197	27.3	7	214	29.1	7	226	29.6
Assault (Homicide)	9	171	18.3	9	140	15.2	9	125	13.3	8	169	18.0
HIV	10	168	18.6	-	-	-	10	118	12.9	-	-	-
Septicemia	-	-	-	10	134	17.3	-	-	-	-	-	-
Essential Hypertension	-	-	-	-	-	-	-	-	-	10	100	17.4

Figure 12. Distribution of Deaths by Cause, Shelby County, 2002-2005

Death from Heart Disease
 Healthy People 2010 Goal: 166 per 100,000
 Shelby County 2005: 266.7 per 100,000

Death from Stroke
 Healthy People 2010 Goal: 48 per 100,000
 Shelby County 2005: 69.5 per 100,000

Death from Diabetes Mellitus
 Healthy People 2010 Goal: 45 per 100,000
 Shelby County 2005: 35.0 per 100,000

White Residents

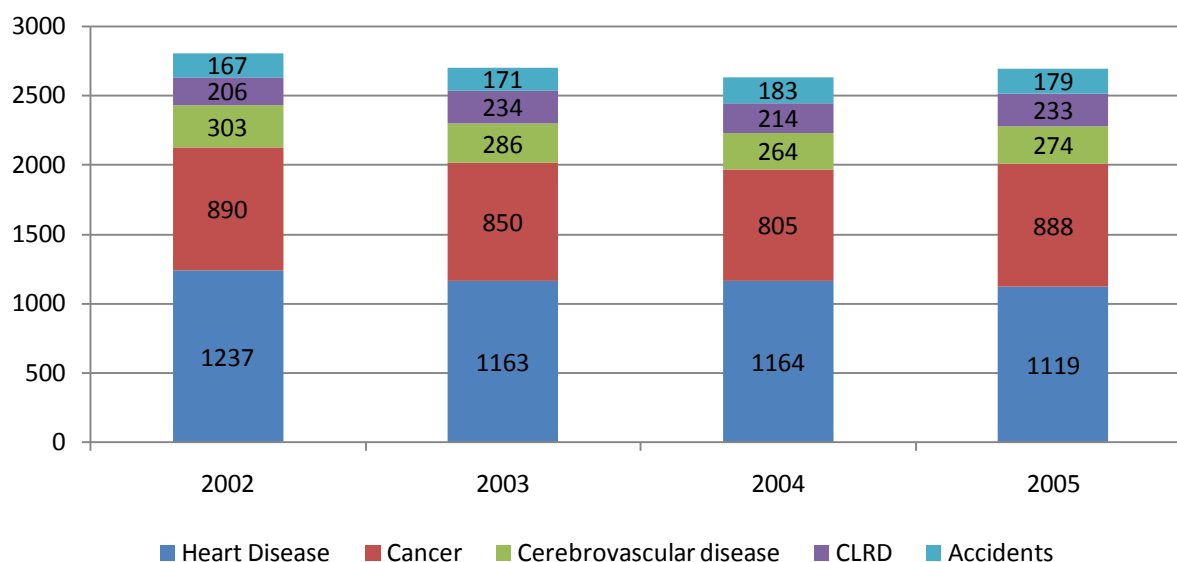
Heart disease, cancer, cerebrovascular disease, CLRD, accidents and Alzheimer's disease were the top 6 causes of death for white residents in Shelby County between 2002 and 2005. Heart disease accounted for approximately 30% of all deaths with the yearly number of deaths decreasing by more than 100 between 2002 and 2005. Cancer was responsible for another 20% of all deaths from 2002-2005 with the number of cancer deaths remaining fairly stable. The number of cerebrovascular deaths decreased by about 10% from 303 deaths in 2002 to 274 deaths in 2005. CLRD was responsible for approximately 6% of all deaths between 2002 and 2005 with an increase of about 14% of deaths during this time. The number of deaths from accidents increased by about 7% from 2002 to 2005 with accidents accounting for 4.5% of all deaths. In white residents, Alzheimer's disease was responsible for approximately 4% of all deaths. The remaining top causes of death, influenza and pneumonia, suicide, septicemia, diabetes mellitus and nephritis, were responsible for approximately 8% of the deaths from 2002 to 2005 in white residents.

Table 14 presents each cause of death with the mortality rate due to each cause and how each ranked per year. Additionally Figure 13 gives the distribution of the top 5 causes of death among white residents between 2002 and 2005.

Table 14. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death among White Residents, Shelby County, 2002-2005

Cause of Death	2002			2003			2004			2005		
	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Heart Disease	1	1237	265.1	1	1163	246.8	1	1164	241.9	1	1119	231.7
Cancer	2	890	190.7	2	850	181.4	2	805	169.4	2	888	186.4
Cerebrovascular disease	3	303	64.8	3	286	60.5	3	264	55.0	3	274	57.0
Chronic Lower Respiratory Disease	4	206	44.2	4	234	49.7	4	214	45.4	4	233	49.5
Accidents	5	167	37.1	5	171	37.7	5	183	40.6	5	179	40.0
Alzheimer's Disease	6	143	30.6	6	144	30.3	6	166	34.3	6	161	33.0
Influenza and Pneumonia	7	128	27.5	7	106	22.5	7	125	26.1	8	83	17.3
Suicide	8	78	17.0	9	66	14.8	9	54	11.9	9	79	17.4
Septicemia	9	67	14.4	10	53	11.4	10	48	10.0	-	-	-
Diabetes mellitus	10	61	13.1	8	72	15.2	8	78	16.7	7	92	19.4
Nephritis	-	-	-	-	-	-	-	-	-	10	44	8.9

Figure 13. Distribution of Top 5 Causes of Death among White Residents, Shelby County, 2002-2005



Black Residents

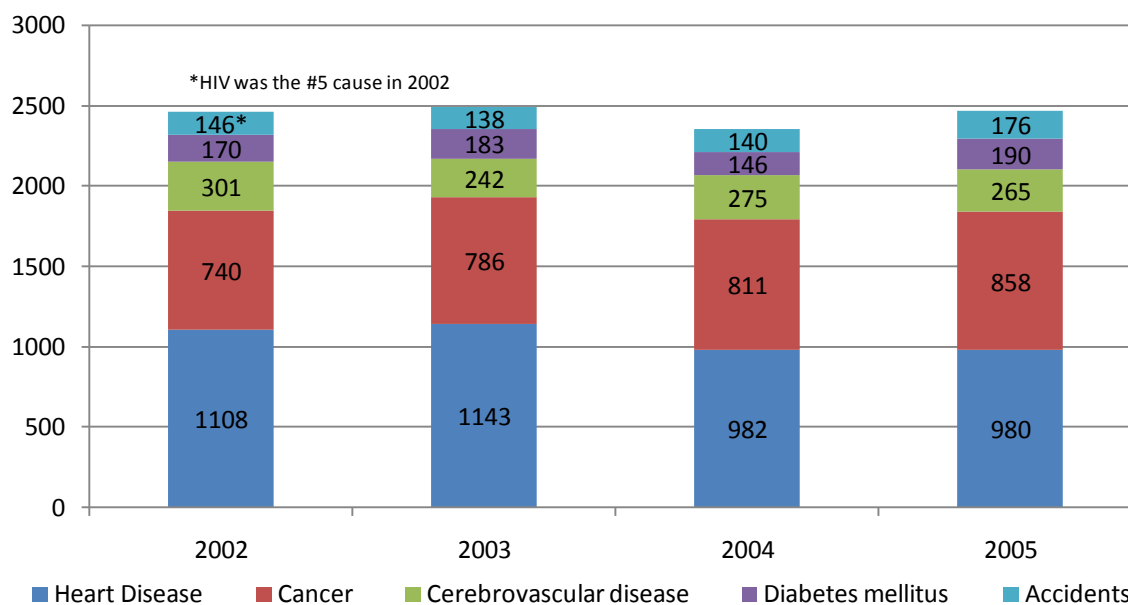
The top four causes of death among black residents remained consistent from 2002-2005. The top four causes of death were heart disease, cancer, cerebrovascular disease and diabetes mellitus. The next 6 most common causes fluctuated within the ranking but were fairly consistent with the exception of influenza and pneumonia being replaced by nephritis in 2004.

The mortality rate from heart disease among black residents decreased by approximately 20% from 2002 to 2005 resulting in more than 120 less deaths caused by heart disease over the four year span. The percent of deaths caused by cancer each year was approximately 20% with the number of cases increasing by 25-45 each year. The number of deaths from cerebrovascular disease decreased by approximately 10%, diabetes deaths increased by about 15% and HIV deaths decreased by about 20% from 2002 to 2005. Assault (homicide) deaths declined by 40% from 2002 to 2003, but increased to 75% of the 2002 deaths in 2004 and 2005. The top 7-10 causes (CLRD, influenza and pneumonia, hypertension and nephritis) accounted for approximately 6.5% of deaths from 2002 to 2005.

Table 15. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 10 Causes of Death among Black Residents, Shelby County, 2002-2005

	2002			2003			2004			2005		
Cause of Death	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Heart Disease	1	1108	390.6	1	1143	395.2	1	982	333.6	1	980	320.1
Cancer	2	740	256.1	2	786	264.6	2	811	263.7	2	858	268.4
Cerebrovascular disease	3	301	109.6	3	242	89.8	3	275	95.0	3	265	88.3
Diabetes Mellitus	4	170	64.5	4	183	64.5	4	146	48.7	4	190	61.4
HIV	5	148	35.6	7	96	22.1	6	108	24.8	7	109	25.0
Accidents	6	146	25.9	5	138	35.8	5	140	34.4	5	176	43.0
Assault (Homicide)	7	143	30.4	6	115	25.1	7	99	20.7	6	137	28.2
Chronic Lower Respiratory Disease	8	79	26.5	9	79	28.8	8	82	27.1	9	88	29.3
Influenza and Pneumonia	9	75	26.8	8	85	30.3	-	-	-	10	65	20.5
Essential Hypertension	10	75	27.7	10	69	24.7	10	75	26.2	8	104	34.9
Nephritis	-	-	-	-	-	-	9	79	26.3	-	-	-

Figure 14. Distribution of Top 5 Causes of Death among Black Residents, Shelby County, 2002-2005



Residents of Other Races

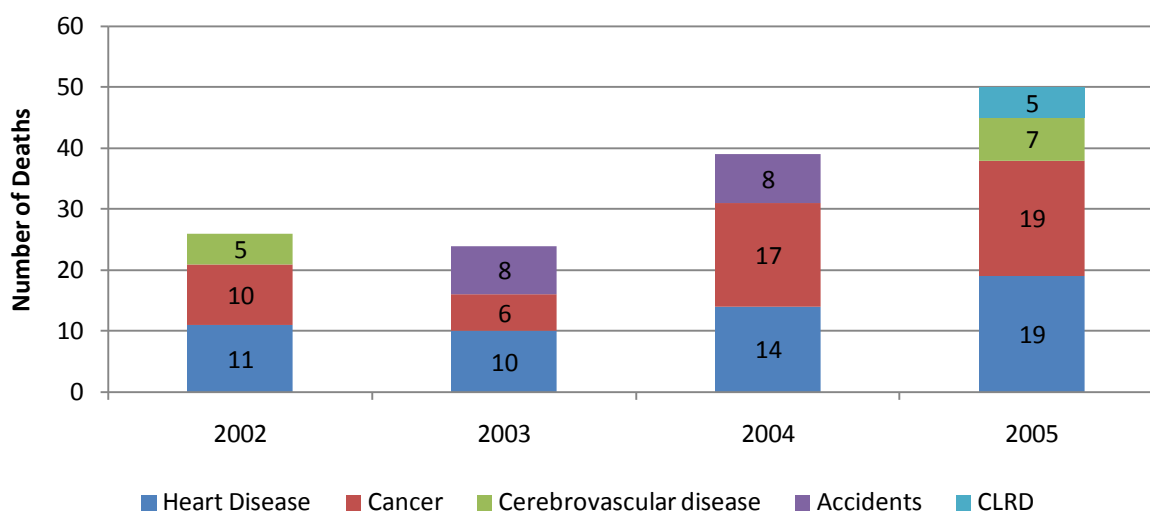
The top 5 causes of death for residents of other races from 2002 to 2005 were heart disease, cancer, cerebrovascular disease, accidents and CLRD. Causes with less than 5 deaths annually are not represented here as there were many causes with only one death per year. As with white and black residents, heart disease and cancer were the leading causes of death. Cancer became the leading cause of death in 2004 among other races, with heart disease second. Each of these categories has very few deaths and the addition of 1-2 deaths can change the rank.

Table 16 presents the number of deaths from each cause and the age-adjusted death rate for each cause by year. Figure 15 displays how the deaths are distributed by cause for each year.

Table 16. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 5 Causes of death among Residents of Other Races, Shelby County, 2002-2005

	2002			2003			2004			2005		
Cause of Death	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Heart Disease	1	11	150.9	1	10	99.6	2	14	164.0	2	19	191.7
Cancer	2	10	105.7	3	6	65.5	1	17	200.0	1	19	127.2
Cerebrovascular disease	3	5	51.7	-	-	-	-	-	-	3	7	97.7
Accidents	-	-	-	2	8	48.2	3	8	14.1	-	-	-
Chronic Lower Respiratory Disease	-	-	-	-	-	-	-	-	-	4	5	29.3

Figure 15. Distribution of Top Causes of Death among residents of other races, Shelby County, 2002-2005



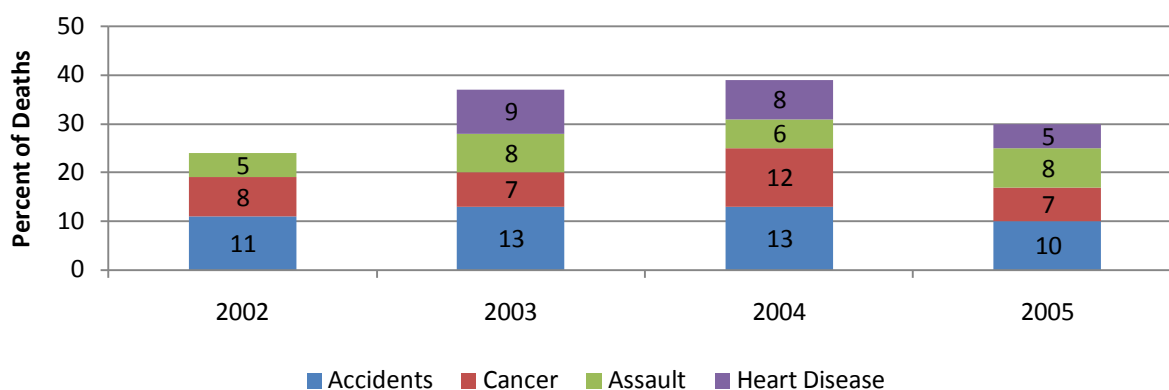
Residents of Hispanic Origin

Deaths among residents of Hispanic origin are presented in Table 17. Within this population accidents are the cause of the most deaths followed by cancer, assault (homicide) and heart disease. As with residents of other races, the number of deaths for each cause is relatively small therefore, adding or subtracting 2-3 deaths can make a difference in the ranking for each cause. Causes with less than 5 deaths per year are not presented here.

Table 17. Number of Deaths and Age-Adjusted Mortality Rate (per 100,000) for Top 4 Causes of Death among Hispanic Residents, Shelby County, 2002-2005

	2002			2003			2004			2005		
Cause of Death	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Accidents	1	11	27.7	1	13	54.5	1	13	41.4	1	10	32.8
Cancer	2	8	131.3	4	7	97.5	2	12	122.5	3	7	29.8
Assault (Homicide)	3	5	10.2	3	8	27.3	4	6	15.2	2	8	20.9
Heart Disease	-	-	-	2	9	93.6	3	8	147.9	4	5	114.8

Figure 16. Distribution of Top Causes of Death among Residents of Hispanic Origin, Shelby County, 2002-2005



Ten Leading Site-Specific Causes of Cancer

Cancer is the second leading cause of death among Shelby County residents. The mortality rate of cancer in Shelby County was 217.2 deaths per 100,000 in 2005. This rate does not yet meet the HP2010 goal of 159.9 deaths per 100,000. The cancer mortality rates for black (268.4 deaths per 100,000) and white (186.4 deaths per 100,000) residents are also greater than the HP2010 goal.

There are multiple types of cancer that make up all of cancer mortality. The most common site of cancer leading to death in Shelby County is lung cancer. This is true across all races. Colorectal cancer and breast cancer among women are the second and third leading site-specific cancers causing death. The number of lung cancer deaths in Shelby County rose approximately 10% from 2002 to 2005 and accounted for almost 30% of all cancer deaths. Colorectal cancer lead to an average of 180 deaths per year and accounted for almost 11% of cancer-related deaths during the four year span. Deaths from breast cancer in females rose from 140 cases in 2002 to 157 cases in 2005, an increase of approximately

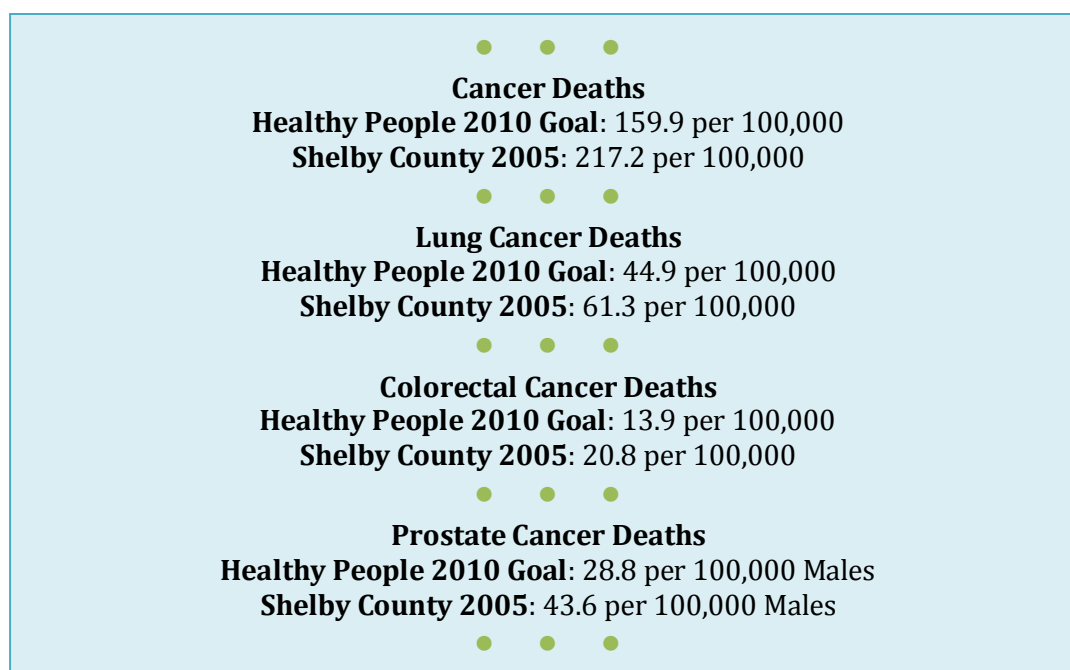
12%. Prostate cancer and pancreatic cancer are the number 4 and 5 site-specific causes of cancer in Shelby County. The number of deaths from prostate and pancreatic cancer rose from 2002 to 2005, by 14% and 8% respectively.

Tables 19-21 display the number of site-specific cancer deaths along with the mortality rate for each and their rank among other site-specific cancers for the total population and by race. The ranking is based on the number of deaths annually, not the age-adjusted mortality rates. The cancer statistics are not presented for residents of other races or Hispanic origin as there were very low numbers of cases or no cases for the several of the years included.

Table 19. Ten Leading Site-Specific Causes of Cancer Mortality among Shelby County Residents, 2002-2005

	2002			2003			2004			2005		
Site of Cancer	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate	Rank	Count	Rate
Lung	1	451	59.3	1	439	57.3	1	445	56.7	1	499	61.3
Colorectal	2	184	24.1	2	196	25.7	2	175	22.1	2	167	20.8
Breast	3	140	30.5	3	156	33.0	3	158	33.1	3	157	32.6
Prostate	4	98	38.9	4	104	41.8	4	100	38.5	4	112	43.6
Pancreas	5	79	10.6	5	82	10.8	5	87	11.1	5	95	12.1
Leukemia	6	67	9.0	6	58	7.5	6	62	7.7	7	61	7.5
Non-Hodgkin's Lymphoma	7	55	7.1	8	49	6.4	8	47	6.0	10	51	6.2
Liver	8	51	6.5	10	41	5.1	7	60	7.4	9	52	6.0
Stomach	9	45	5.8	-	-	-	10	41	5.3	-	-	-
Ovary	10	44	9.7	7	52	11.1	9	46	9.5	6	63	13.2
Central Nervous System	-	-	-	9	42	5.1	-	-	-	-	-	-
Esophagus	-	-	-	-	-	-	-	-	-	8	55	6.6

*Rate is age-adjusted to the 2000 US Standard Population



White Residents

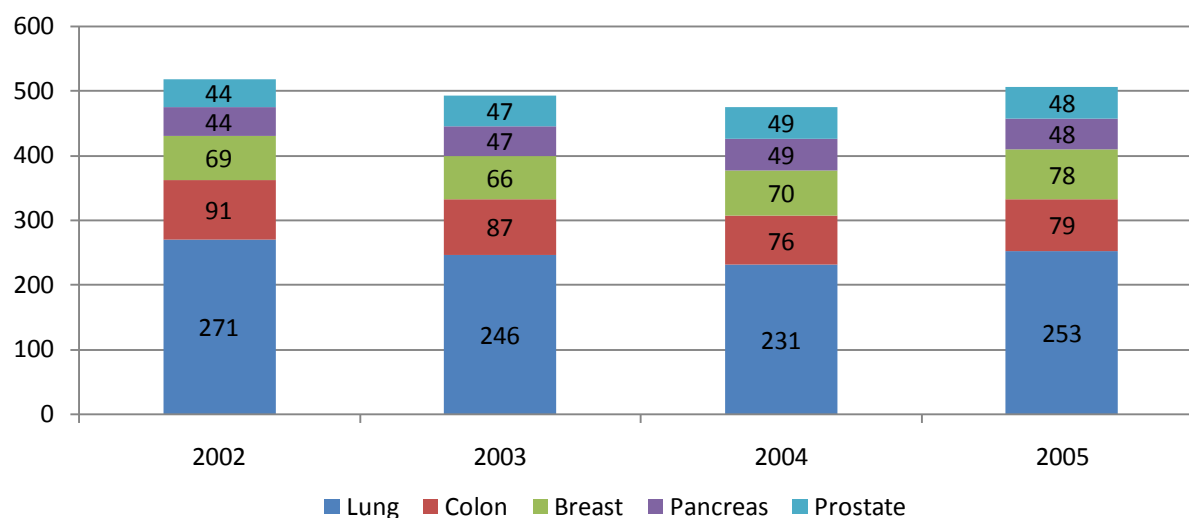
The top five sites of cancer-related mortality among white residents are the lungs, colon and rectum, breast (in females), pancreas and prostate (in men). Though leukemia was the #4 cause of death in 2002, the rates of leukemia dropped in subsequent years, lower than the rates for pancreatic cancer and prostate cancer in men. It appears that from 2002 to 2005 the number of lung cancer related deaths dropped by about 7%. The mortality rate among white residents remained about 10% higher than the goal for HP2010 for lung cancer (53.2 vs. 44.9), but the trend is promising. There was also a drop during this same time frame for colorectal cancer. The number of deaths from colorectal cancer was 91 in 2002 and 79 in 2005, a drop of 13%. The mortality rate for colorectal cancer is within 5% of the HP2010 goal of 13.9 deaths per 100,000. Unfortunately the number of deaths from breast cancer in females increased from 2002 to 2005. The number of deaths from breast cancer rose about 13% from 2002-2005. Both pancreatic cancer and prostate cancer in men experienced a slight increase (9% and 10% respectively) in the number of deaths. The mortality rate of prostate cancer among white men (27.0 deaths per 100,000) remains below the HP2010 goal of 28.8 deaths per 100,000. The remainder of site-specific cancers was responsible for approximately 13% of the cancer-related deaths among whites.

Table 20. Ten Leading Site-Specific Causes of Cancer Mortality among White Shelby County Residents, 2002-2005

	2002			2003			2004			2005		
Site of Cancer	Rank	Count	Rate*	Rank	Count	Rate*	Rank	Count	Rate*	Rank	Count	Rate*
Lung	1	271	58.1	1	246	52.8	1	231	49.0	1	253	53.2
Colorectal	2	91	19.4	2	87	18.6	2	76	15.6	2	79	16.5
Breast	3	69	25.7	3	66	24.1	3	70	24.4	3	78	29.4
Leukemia	4	49	10.6	6	37	7.9	6	33	7.2	8	32	6.8
Pancreas	5	44	9.4	4	47	10.0	4	49	10.4	4	48	9.9
Prostate	6	42	25.6	5	44	27.6	5	46	27.4	5	46	27.0
Non-Hodgkin's	7	34	7.3	8	30	6.4	7	29	5.9	7	33	6.9
Ovary	8	31	11.4	9	25	8.9	10	21	7.2	6	35	12.8
CNS	9	26	5.6	7	35	7.3	9	24	5.1	-	-	-
Liver	10	23	4.8	-	-	-	8	26	5.4	-	-	-
Bladder	-	-	-	10	21	4.5	-	-	-	9	27	5.7
Esophagus	-	-	-	-	-	-	-	-	-	10	27	5.7

*Rate is age-adjusted to the 2000 US Standard Population

Figure 18. Five Leading Site-Specific Causes of Cancer Mortality among White Shelby County Residents, 2002-2005



*Leukemia was the #4 cause of death in 2002

Black Residents

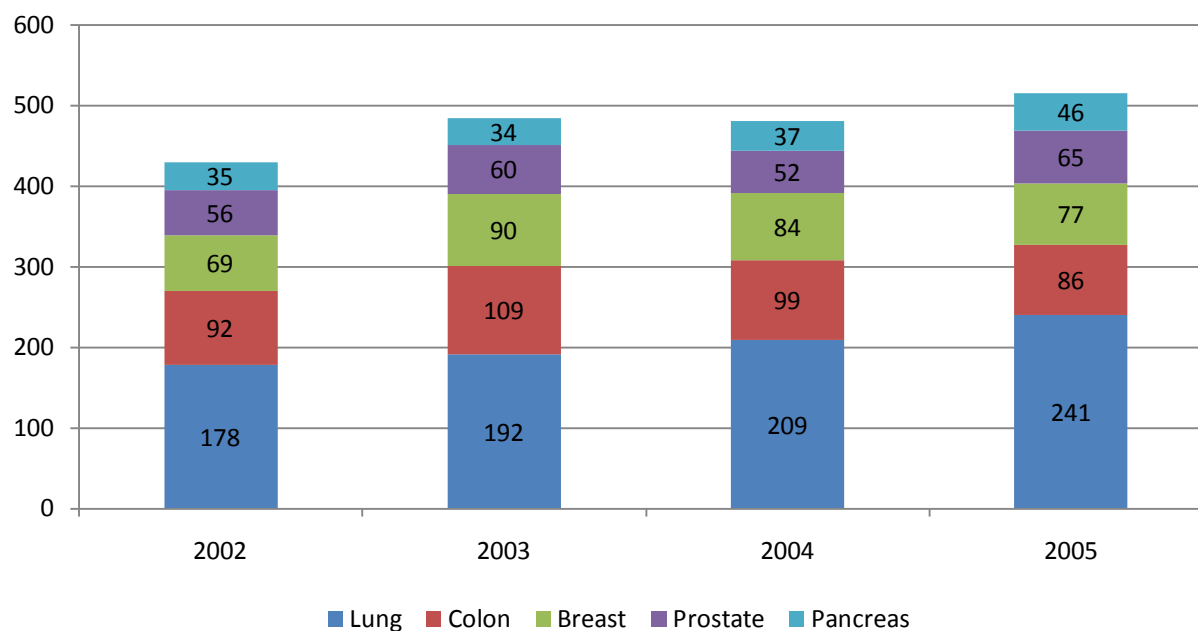
The top site-specific cancer causes of death among black residents are lung cancer, colorectal cancer, breast cancer in females, prostate cancer in males and pancreatic cancer. These cancers account for approximately 60% of all cancer deaths. The number of lung cancer deaths rose each year from 2002 to 2005. There was a 35% increase in the number of lung cancer deaths among black residents in 2005 compared with 2002. The mortality rate for lung cancer among black residents is almost two times greater in Shelby County than the goal for HP2010 (74.6 vs. 44.9). Colorectal cancer deaths decreased overall from 92 deaths in 2002 to 86 deaths in 2005, a decrease of approximately 7%. However, the mortality rate of colorectal cancer among black residents remains about two times higher than the HP2010 goal (27.8 vs. 13.9). Breast cancer deaths among females have fluctuated over the four year span accounting for about 10% of cancer-related deaths each year. The same is true for prostate cancer deaths among men. The number of deaths fluctuated over the four years but prostate cancer consistently accounted for approximately 7% of cancer-related deaths each year. Unfortunately the mortality rate for prostate cancer among black men in Shelby County is almost three times that of the HP2010 goal (78.5 vs. 28.8). The number of deaths from pancreatic cancer increased by approximately 30% from 35 deaths in 2002 to 46 deaths in 2005. The age-adjusted mortality rate also increased from 13.2 deaths per 100,000 in 2002 to 16.0 deaths per 100,000 in 2005.

As of 2005 the remaining top causes of cancer mortality were ovarian cancer, esophageal cancer, leukemia, stomach cancer and liver cancer. These remaining site-specific cancers lead to 15% of all cancer deaths.

Table 21. Top Ten Site-Specific Causes of Cancer Mortality among Black Shelby County Residents, 2002-2005

	2002			2003			2004			2005		
Site of Cancer	Rank	Count	Rate*	Rank	Count	Rate*	Rank	Count	Rate*	Rank	Count	Rate*
Lung	1	178	61.4	1	192	65.1	1	209	69.3	1	241	74.6
Colorectal	2	92	31.9	2	109	38.4	2	99	33.7	2	86	27.8
Breast	3	69	37.0	3	90	46.0	3	84	42.8	3	77	37.2
Prostate	4	56	64.5	4	60	71.5	4	52	60.1	4	65	78.5
Pancreas	5	35	13.2	5	34	11.6	5	37	12.2	5	46	16.0
Stomach	6	31	10.3	7	22	8.0	10	22	7.3	9	25	8.5
Liver	7	26	8.6	9	20	6.4	6	32	9.9	10	25	7.5
Lip	8	21	6.6	10	20	6.1	9	24	6.4	-	-	-
Non-Hodgkin's	9	12	6.7	-	-	-	-	-	-	-	-	-
Leukemia	10	17	6.0	8	21	6.5	7	29	8.6	8	27	8.1
Ovary	-	-	-	6	27	14.2	8	24	12.7	6	28	14.2
Esophagus	-	-	-	-	-	-	-	-	-	7	27	8.0

*Rate is age-adjusted to the 2000 US Standard Population

Figure 19. Top Five Site-Specific Causes of Cancer Mortality among Black Shelby County Residents, 2002-2005

Breast Cancer

Breast cancer remains one of the leading causes of death among women each year. Compared with the HP2010 goal of 22.3 deaths per 100,000 women, Shelby County had a mortality rate of 32.6 deaths per 100,000 women in 2005.

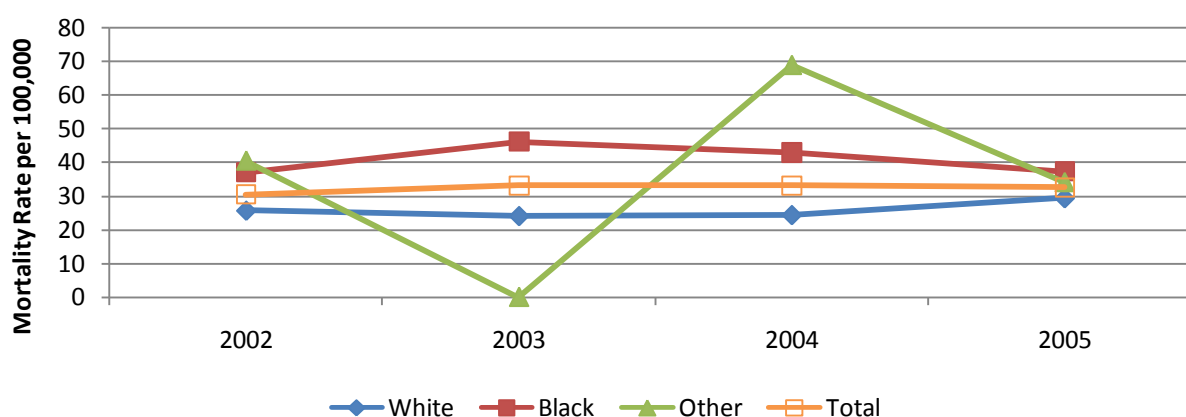
There is a great disparity in the number of breast cancer-related deaths among black women compared with white women in Shelby County. From 2002 to 2005, almost 40 more black women died from breast cancer than white women. The age-adjusted rates reflect a greater disparity than the number of deaths. The reason the age-adjusted mortality rates for black women are so much greater is because over 35% of the black women that die from breast cancer are under 50 years old vs. only about 10% for white women.

Though the rates for women of other races appear very high, keep in mind that since the population within Shelby County is so small, very small changes in the number of deaths can affect the mortality rate dramatically.

Table 22. Breast Cancer Age-Adjusted Mortality Rate (per 100,000) among Females, by Race, Shelby County, 2002-2005

	White		Black		Other		Total	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002	69	25.7	69	37.0	2	40.5	140	30.5
2003	66	24.1	90	46.0	-	-	156	33.0
2004	70	24.4	84	42.8	4	68.9	158	33.1
2005	78	29.4	77	37.2	2	34.1	157	32.6

Figure 20. Breast Cancer Mortality Rate among Females, by Race, Shelby County, 2002-2005



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Breast Cancer Deaths
Healthy People 2010 Goal: 22.3 per 100,000 Females
Shelby County 2005: 32.6 per 100,000 Females
 ● ● ●

HIV/AIDS Mortality

The mortality rate for HIV/AIDS decreased from 18.6/100,000 in 2002 to 13.5/100,000 in 2005 and the number of deaths due to HIV/AIDS decreased by 26% for Shelby County. There is a great disparity in the numbers of HIV/AIDS deaths between black and white residents. There were approximately 8 times more deaths among black residents between 2002 and 2005 than white residents (461 vs. 56). This is consistent with the disparity that exists among residents living with HIV/AIDS in Shelby County. Table 23 displays the number of deaths and age-adjusted mortality rate for HIV/AIDS by race and year. The number of HIV/AIDS deaths decreased by approximately 25% for both races during the four year span. Compared with the HP2010 goal of 0.7 deaths per 100,000, there is much work to be done in Shelby County to bring down the rate from 2005 (13.5 deaths per 100,000) especially within the black population (25.0 deaths per 100,000).

Table 23. Number of HIV/AIDS Deaths and Mortality Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005

	Total		White		Black		Hispanic	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002	168	18.6	20	4.3	148	35.6	-	-
2003	107	11.8	11	2.5	96	22.1	*	*
2004	118	12.9	10	2.1	108	24.8	*	*
2005	124	13.5	15	3.3	109	25.0	-	-

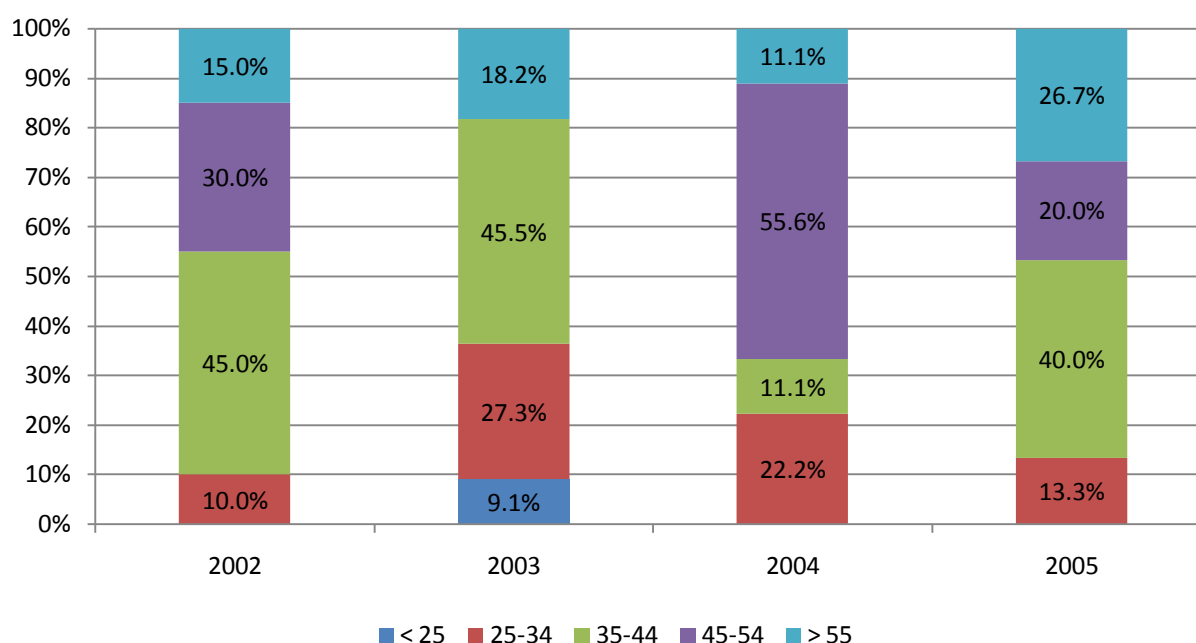
*Suppressed due to low count of HIV/AIDS deaths

● ● ●
HIV Deaths
Healthy People 2010 Goal: 0.7 per 100,000
Shelby County 2005: 13.5 per 100,000
 ● ● ●

Figures 21 through 24 illustrate how HIV/AIDS mortality is distributed across age groups within various populations of Shelby County.

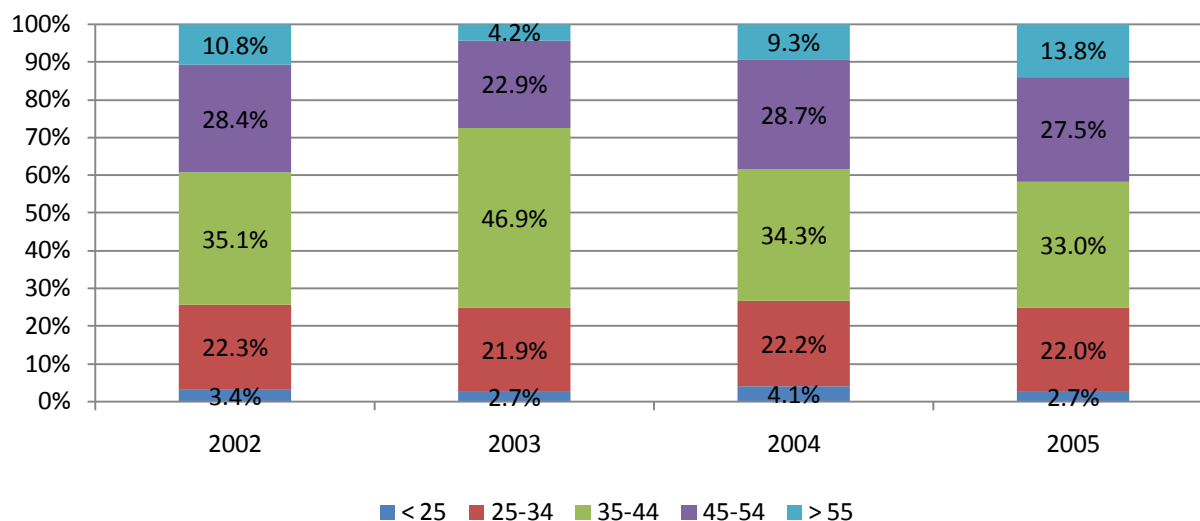
Among white residents the majority of HIV/AIDS deaths typically occurred between the ages of 35 and 44. In 2004, there appears to be a shift to over half of the deaths occurring between the ages of 45 to 54, however, since there are such small numbers of deaths each year, a change in 2-3 deaths in one age group can make a dramatic effect on the distribution across age groups. In 2004 there was only 1 death within the 35-44 age group which dropped the percentage of deaths to 11.1. The remainder of the age groups remained relatively stable compared with other years but the change within the 35-44 age group greatly impacted how the deaths were distributed in the other groups.

Figure 21. Age Distribution of HIV/AIDS Deaths for White Shelby County Residents, 2002-2005

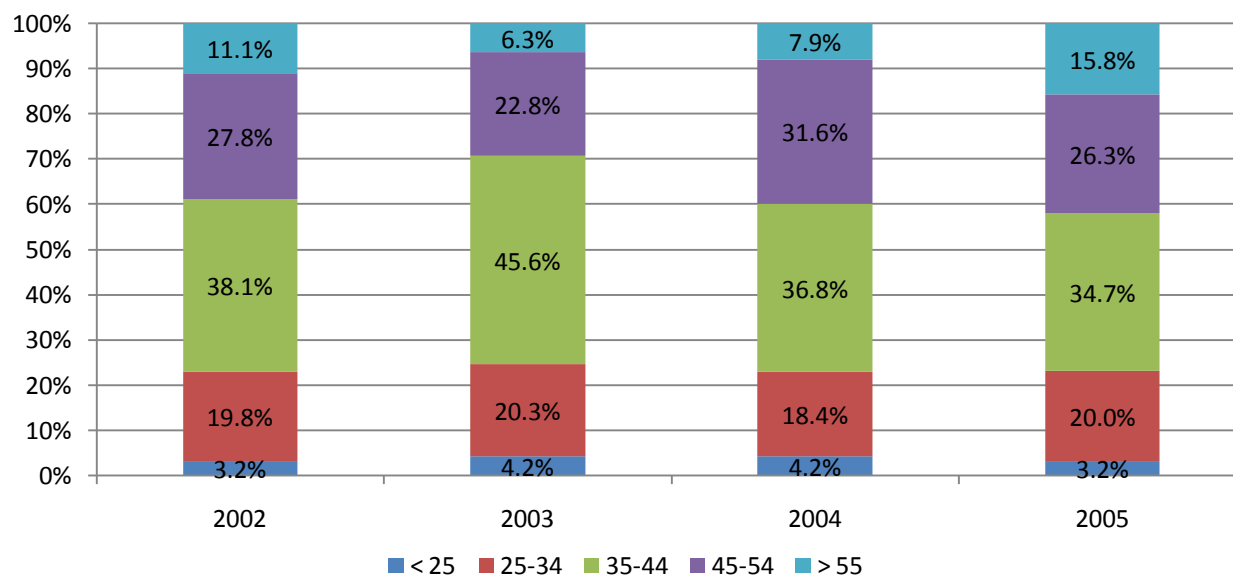


Among black residents, the age distribution of HIV/AIDS deaths remains relatively stable across the four year span. This is due to the larger number of HIV/AIDS deaths that occur within this population. A change of 2-3 deaths in one age group does not affect the distribution of deaths as with the white population.

The majority of deaths occurred among black residents ages 35-44. There is some variation from year to year, but overall the majority of deaths remain within the same age group. There is also a small percentage, about 3%, of deaths that occur among black residents less than 25 years of age each year. The large number of deaths at younger age groups may reflect that black residents tend to be diagnosed with HIV/AIDS in the later stages of the disease which may lead to poorer outcomes at younger ages than their white counterparts. Almost 45% of white residents that die from HIV/AIDS are 45 years of age or older. This percentage is only 36 among black residents who die from HIV/AIDS.

Figure 22. Age Distribution of HIV/AIDS Deaths among Black Shelby County Residents, 2002-2005

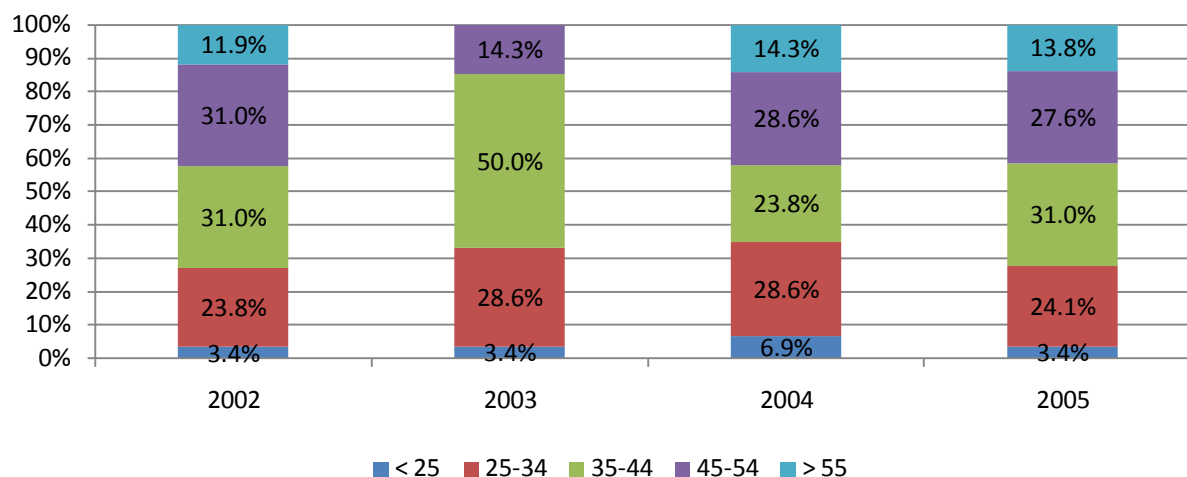
Most HIV/AIDS deaths occur among men, who also bear the greatest burden of disease within Shelby County. Again the majority of deaths occur between the ages of 35 and 44 among men. Men also consistently have almost 4% of deaths occur before 25 years of age.

Figure 23. Age Distribution of HIV/AIDS Deaths among Male Shelby County Residents, 2002-2005

There are much fewer deaths due to HIV/AIDS among females in Shelby County than among males. The deaths occurring among females are almost evenly spread across ages 25-54 for most years. There is a lacking majority of deaths occurring within only one age group as seen with males. There is a clear

majority among 35-44 year old females in 2003, but as previously mentioned there are fewer numbers of deaths among females, so a change of 2-3 cases within one age group can greatly affect the distribution of deaths.

Figure 24. Age Distribution of HIV/AIDS Deaths among Female Shelby County Residents, 2002-2005



Assault Deaths (Homicide) and Suicide

In Shelby County, the number of assault deaths (homicides) fluctuates per year. It appeared that the homicide rate was dropping in 2003 and 2004 compared with 2002. Unfortunately the number of homicides rebounded in 2005 to within 2% of the 2002 deaths. There is a disproportionately large percentage of homicides occurring among black residents than other races. Over 80% of homicides occurring between 2002 and 2005 were among black residents. There was a great reduction (30%) in the number of homicides among black residents from 2002 to 2004 but as mentioned with the overall trend, the number of homicides rose by almost 40% from 2004 to 2005.

Table 24. Number of Homicides and Homicide Death Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005

	Total		White		Black		Other		Hispanic	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002	171	18.3	25	5.7	143	30.4	3	14.8	5	10.2
2003	140	15.2	24	5.3	115	25.1	1	4.6	8	27.3
2004	125	13.3	25	5.6	99	20.7	1	3.5	6	15.2
2005	169	18.0	30	7.0	137	28.2	2	8.7	8	20.9

The HP2010 goal for homicide is to reduce the number of deaths due to homicide to 3.0 deaths per 100,000 in the population. The rate in Shelby County is 6 times greater than the HP2010 goal. There is a great deal of work to be done towards trying to decrease the homicide rate within our community.

● ● ●
Homicide Deaths
Healthy People 2010 Goal: 3.0 per 100,000
Shelby County 2005: 18.0 per 100,000
 ● ● ●

Suicide rates did not change greatly over the four year span from 2002 to 2005. As with homicides, the numbers of suicides dropped from 2002 to 2004. In 2005 however, the numbers increased greater than those in 2002. The majority of suicides occur within the white population in Shelby County. Approximately 75% of all suicides were among white residents during the four year span.

Table 25. Number of Suicides and Suicide Death Rate (per 100,000) among Shelby County Residents, by Race and Hispanic Origin, 2002-2005

	Total		White		Black		Other		Hispanic	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
2002	97	11.1	78	17.0	18	4.4	*	*	*	*
2003	89	10.0	66	14.8	23	5.0	-	-	*	*
2004	74	8.2	54	11.9	20	4.5	-	-	*	*
2005	107	12.0	79	17.4	27	6.2	*	*	*	*

The rate of suicide deaths in Shelby County is approximately 2.5 times higher than the HP2010 goal of 5.0 suicide deaths per 100,000 people in the population.

● ● ●
Suicide Deaths
Healthy People 2010 Goal: 5.0 per 100,000
Shelby County 2005: 12.0 per 100,000
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1. McLanahan, S. (1995). The consequences of nonmarital childbearing for women, children, and society. In National Center for Health Statistics, *Report to Congress on out-of-wedlock childbearing*. Hyattsville, MD: National Center for Health Statistics.
2. Healthy People 2010, <http://www.healthypeople.gov/>
3. CDC, National Center for Health Statistics: NCHS Definitions.
<http://0-www.cdc.gov.mil1.sjilibrary.org/nchs/datawh/nchsdefs/list.htm>
4. Tennessee Department of Health, Health Information Tennessee, <http://hit.state.tn.us>
5. Tennessee Department of Health, Vital Records Department, Birth and Death Certificates